

## Class Outline

In general, for this 3-credit course, two hours (12:20-2:20) will be spent each week in lectures/presentations, and the final hour (2:20-3:20) will be reserved for team work and discussion.

Week	Topic	Readings	Assignment/ Notes
<b>Week 1</b> <b>September 2, 2003</b> <b>Nancy Nachreiner</b>	Course overview and objectives History of occupational health and safety “A Dangerous Business” video (Frontline, 2003) Framework for occupational health and safety Professional associations/licensure/certification OH&S resources: consultants, publications, web sites	DiNardi: Chapter 1	
<b>Week 2</b> <b>September 9, 2003</b> <b>John Mulhausen</b>	<u>Recognition/Assessment</u> Physical/Energy Hazards (mechanical, noise, radiation, temperature, light, structures, electrical, fire, explosion, confined space)	DiNardi: (pages as indicated) Chapter 4, Environmental and occupational toxicology: pp 63-75 Chapter 14, Dermal exposure: pp 285-293. Chapter 20, Noise, vibration and ultrasound: pp 425-434 Chapter 21, Nonionizing radiation: pp 491-493 Chapter 22, Ionizing radiation: pp 581-584 Chapter 24, Applied physiology: pp 596-600 and 629-637 Chapter 42, Confined Spaces: pp 1125-113	

<p><b>Week 3</b>  <b>September 16, 2003</b>  <b>Pete Raynor</b></p>	<p><u>Evaluation/Diagnosis</u>  Legal aspects of occupational health and safety  Occupational exposure limits (PEL, documentation for TLV)  Sampling strategies</p>	<p>DiNardi: Chapters 2, 15  Kennedy GL JR. Setting a threshold limit value (TLV): The process. Chemical Health &amp; Safety, July/August 2001, pp 13-15.  Weisburger EK, History and background of the Threshold Limit Value Committee of the American Conference of Governmental Industrial Hygienists. Chemical Health &amp; Safety, July/August 2001, pp 10-12.</p>	
<p><b>Week 4</b>  <b>September 23, 2003</b>  <b>John Mulhausen</b></p>	<p><u>Recognition/Assessment</u>  Chemical Hazards (vapors, mists, solids, fumes, aerosols)</p>	<p>(Combined with week 3 readings)</p>	
<p><b>Week 5</b>  <b>September 30, 2003</b>  <b>John Mulhausen</b></p>	<p><u>Recognition/Assessment</u>  Biological Hazards (fungi, molds, virus, bacteria, animals)  Psycho-social Hazards (stress, violence)</p>	<p>S. R. DiNardi, Editor. Chapters 18 &amp; 28</p>	
<p><b>Week 6</b>  <b>October 7, 2003</b>  <b>Gary Olmstead</b></p>	<p>Plant tour: Roles and team approach discussion</p>		<p><b>Class meets at Honeywell.</b>  <b>Tour participation: 5 points</b>  <b>Midterm distributed</b></p>
<p><b>Week 7</b>  <b>October 14, 2003</b>  <b>Pete Raynor</b></p>	<p><u>Hierarchy of Controls</u>  Engineering controls  Administrative controls  Personal protective equipment</p>	<p>DiNardi: Chapters 20 &amp; 31</p>	<p><b>Midterm due (20 points)</b></p>

<p><b>Week 8</b> <b>October 21, 2003</b></p>	<p>Special Populations: The labor perspective (Professor Peter Rachleff, Macalester College and Women in the Trades modules)</p>	<p>Frumkin, H., Pransky, G. Special Populations in Occupational Health. (1999). Occupational Medicine: State of the Art Reviews, 14 (3), 479-484.</p> <p>Ashford, N.A. (1999). The Economic and Social Context of Special Populations. Occupational Medicine: State of the Art Reviews, 14 (3), 485-493.</p> <p>Frumkin, H., Walker, E.D., and Friedman-Jimenez, G. (1999). Minority Workers and Communities. Occupational Medicine: State of the Art Reviews, 14 (3), 495-517.</p>	<p><b>No formal class this week. Review online activities through WebCT; CD available from Nancy Nachreiner</b></p>
<p><b>Week 9</b> <b>October 28, 2003</b> <b>Gary Olmstead</b></p>	<p><u>Program Management</u> Goals Structure/Process/Outcome objectives Policies/Procedures Record keeping Evaluation of quality/satisfaction Evaluation of cost</p>	<p>DiNardi: Chapters 37 and 38</p>	
<p><b>Week 10</b> <b>November 4, 2003</b> <b>John Shutske</b></p>	<p><u>Control Strategies</u> Safety and Engineering Ergonomics Agricultural Health and Safety Issues</p>	<p>P. Hagan Editor. Chapter 16 Safety Engineering: Safety through Design. 1999. Fred Manuele. Chapter 2.</p> <p><a href="http://safety.coafes.umn.edu">http://safety.coafes.umn.edu</a> <a href="http://www.osha.gov/SLTC/agriculturaloperations/index.html">http://www.osha.gov/SLTC/agriculturaloperations/index.html</a></p>	<p><b>Fact Sheet Due (10 points)</b></p>
<p><b>Week 11</b> <b>November 11, 2003</b> <b>Nancy Nachreiner</b></p>	<p><u>Control Strategies</u> Health promotion Education/Training programs (legal requirements, adult learning)</p>	<p><a href="http://www.cba.uri.edu/scholl/notes/change_TTM.htm">http://www.cba.uri.edu/scholl/notes/change_TTM.htm</a></p>	

<b>Week 12</b> <b>November 18, 2003</b> <b>John Shutske</b>	<u>Control Strategies</u> Audits, injury investigation, emergency preparedness	P. Hagan Editor. Chapter 8, <a href="http://www.osha-slc.gov/SLTC/emergencypreparedness/index.html">http://www.osha-slc.gov/SLTC/emergencypreparedness/index.html</a>	
<b>Week 13</b> <b>November 25, 2003</b> <b>Student Presentations</b>	TLV Critiques	As needed related to your group's specific TLV	<b>Student TLV Presentations (15 points)</b>
<b>Week 14</b> <b>December 2, 2003</b> <b>Mike McGrail</b>	<u>Recognition/Assessment</u> Health Assessments Employee Selection Tour of Regions Occupational Health Clinic	Rogers, Chapter 10 DeKort, W., Van Dijk, F. 1997. Preventive effectiveness of pre-employment medical assessments. Occupational and Environmental Medicine, 54 (1), 1-6.	<b>Class meets at Region's Hospital Tour participation: 5 points</b>
<b>Week 15</b> <b>December 9, 2003</b> <b>Nancy Nachreiner</b>	Issues and Trends Special Populations Evaluation Review for Final	DiNardi: Chapter 50	<b>Internet Module Evaluation Due (5 points)</b>
<b>Final Exam</b> <b>4:00-6:00</b> <b>Saturday</b> <b>December 20, 2003</b>		Comprehensive	<b>40 points</b>

# Web-Based Fact Sheet

DUE DATE: November 4, 2003

For this assignment, you should select a contemporary **occupational health and safety** topic. For example, you might be interested in what can be done about work-related violence, or whether back belts are recommended for lifting heavy objects. With this topic in mind, conduct a web search for information on this topic.

Prepare a fact sheet (one to two pages maximum) using the information you found on the web relevant to your topic. A Question/Answer format works well for this kind of document. This fact sheet should be something you would be willing to share with **both management and workers** when they ask you a question about this topic--keep in mind that they will not understand complicated scientific terms; therefore, avoid technical jargon. Be sure to provide appropriate references to the materials you use to develop this fact sheet. You are not limited to using just materials obtained from your web search; however, it should be clear in your fact sheet that you have utilized information gained from a web search. At this point in your studies, you are likely familiar with using the library to research an issue; the purpose of this assignment is to make you familiar with utilizing the wealth of information available on the web.

For examples of fact sheets, please refer to the following websites:

[http://www.osha.gov/OshDoc/data\\_BloodborneFacts/bbfact03.pdf](http://www.osha.gov/OshDoc/data_BloodborneFacts/bbfact03.pdf)

[http://www.osha.gov/OshDoc/data\\_General\\_Facts/factsheet-workplace-violence.pdf](http://www.osha.gov/OshDoc/data_General_Facts/factsheet-workplace-violence.pdf)

## Evaluation

This assignment is worth 10 points:

<b>Grading Criteria</b>	<b>Points</b>
Error free spelling, proper grammar and punctuation	2
Minimum of three websites listed as references	2
Written to appropriate audience (useable for employees and management)	2
Appropriate length of document (1-2 pages)	1
Topic relevant to occupational health and safety	1
Visually interesting: used graphics and/or modified text	1
Avoids technical terminology/jargon	1

# Threshold Limit Values Assignment

DUE DATE: November 25, 2003

In general, work on this project will be done in groups, with a final oral group presentation. Groups will be formed early in the semester and you will be given some class time throughout the semester to work together; however, you will need additional meeting time outside of class. For this assignment, your group will select the documentation of a single threshold limit value (TLV) (these will be discussed Week 3). Your group may choose from any of the TLVs. If you have trouble selecting a TLV, please consult the instructor. Each group will do one presentation, 15 minutes in length, on a critique of a TLV document. Your points for this assignment are based on your presentation and your evaluation from your fellow team members. No formal paper is required for this assignment. Include a brief summary of the TLV in your introductory comments, including a description of the type of data on which the TLV are based. You may want to consider the assessment criteria listed below (and any other questions which occur to you) as you prepare your critique. Short but regular group meetings (we recommend on a weekly basis) with a breakdown of tasks and a timetable of tasks and completion dates will assist in making this a manageable assignment. We also suggest designating a group leader who will help keep the group stay on track. We suggest exchanging phone and fax numbers and e-mail addresses to facilitate communication.

## Assessment Criteria

This project is worth 15 points. Both your group and the instructor will provide input to your grade.

Your fellow group members will evaluate your team effort. The group evaluation will be worth 2 points, and will assess the following criteria (see attached form):

1. Did the group member complete tasks on time?
2. Did the group member provide constructive input, when necessary?
3. Did the group member communicate regularly and promptly with other group members?
4. Did the group member attend group meetings?

The instructor's evaluation of the group presentation will be worth 3 points and will be evaluated using the following criteria:

1. How was the presentation organized?
2. Was the presentation within the allocated time limit (15 minutes)?
3. Did all group members participate in the presentation/preparation for the presentation? (It is not necessary that each team member formally present; however, it should be obvious that each member was involved with the presentation. For example, the entire team may be seated together in the front of the room during the presentation, and all be ready to respond to audience questions.)
4. Did the group use audiovisual aids in an appropriate manner?
5. Did the group involve the audience in its presentation?
6. Was the presentation creative?

The remaining 10 points are based on the instructor evaluation of the critique of TLV documentation. Criteria for the content of the presentation are as follows:

1. What is the current TLV, and are there any notations?
  - a. What is this product used for?
  - b. What types/classes of workers may be exposed?
  - c. How many people may be exposed?
  - d. What are the primary health effects?
2. How well did the team present a brief summary/history of the TLV?

- a. When were studies supporting this TLV conducted?
  - b. What types of data were used (animal, human, etc.)?
  - c. Do studies conflict, or do all support the same levels?
  - d. What health effects do the studies report on (dermal, respiratory, cancer, etc.)?
  - e. What studies have been published *since* the current TLV was established?
3. Does your group agree with the current levels?
- a. Why or why not?
  - b. What TLV would your group recommend?
  - c. What are the implications if you recommend a change to the current levels?

**Individual Contribution to the Team Effort**  
**Due: November 25, 2003**

How well did your team member work at assigned tasks?

0	0.5	1	1.5	2
<b>Made no effort</b>	<b>Made a little effort</b>	<b>Spurts of effective work</b>	<b>Above average in contribution</b>	<b>Worked well, achieved definite contributions</b>

In the table below, fill in the name of each of your team members and the score you would give them (0-2) for their contribution to the group presentations based on the following questions:

- Did the group member complete tasks on time?
- Did the group member provide constructive input, when necessary?
- Did the group member communicate regularly and promptly with other group members?
- Did the group member attend group meetings?

Each team member is to complete the form for his/her team members. An average score will be computed.



Your name: \_\_\_\_\_

Name of Team Members \_\_\_\_\_ Score based on a total of 2 points possible \_\_\_\_\_

--	--

## Instructor Evaluation of the Critique of TLV Documentation

**TEAM NAMES:** \_\_\_\_\_

**TLV NAME:** \_\_\_\_\_

1. How well did the team present the current TLV and notations?

<b>1</b>	<b>1.5</b>	<b>2</b>	<b>2.5</b>	<b>3</b>
Poor				Excellent

2. How well did the team present a brief history/summary of the TLV and data on which the TLV was based?

<b>.7</b>	<b>1.4</b>	<b>2.1</b>	<b>2.8</b>	<b>3.5</b>
Poor				Excellent

3. How well were the team's proposed exposure levels (or agreement with current limits) discussed?

<b>1</b>	<b>1.5</b>	<b>2</b>	<b>2.5</b>	<b>3</b>
Poor				Excellent

4. How well was the presentation organized?

<b>0.1</b>	<b>.25</b>	<b>.5</b>	<b>.75</b>	<b>1</b>
Poor				Excellent

5. Was the presentation within the allocated time limit (15 minutes)?

<b>0</b>	<b>0.5</b>
No	Yes

6. Was it apparent that all group members participated in the presentation/preparation?

<b>0</b>	<b>0.5</b>
No	Yes

7. Did the group use audiovisual aids in an appropriate manner?

<b>0</b>	<b>0.5</b>
No	Yes

8. Did the group involve the audience in its presentation?

<b>0</b>	<b>0.5</b>
No	Yes

9. Was the presentation creative?

<b>0</b>	<b>0.5</b>
No	Yes

**Total =** \_\_\_\_\_ (13 points possible)

**Comments:**

NAME. \_\_\_\_\_

***Internet Modules Review***

***PubH 5170: Introduction to Occupational Health and Safety***

The following 3 pages are your review of the Internet modules used in this class. Please complete and return this form by **December 9, 2003**. Your review is worth 5 points for completing and turning in.

Your input is essential for providing feedback to the designer and in accomplishing the long-term goal of providing occupational health graduate training via distance education methodologies. Thank you in advance for your help.

*For Questions 1 through 4, please indicate in the spaces provided under each section whether you:*

1	2	3	4	5	6	7
<b>Strongly Agree</b>	<b>Agree</b>	<b>Somewhat Agree</b>	<b>Somewhat Disagree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>I have no opinion about the statement.</b>

**Regarding the Women in the Trades Module:**

1. \_\_\_ Overall, the Women in the Trades module enhanced my ability to meet the course learning objectives.
2. \_\_\_ The module was organized in a logical manner.
3. \_\_\_ The Women in the Trades module assignment heightened my awareness of occupational health and safety issues for this special population.
4. \_\_\_ The amount of time to complete this module (1.5 hours to go through the content online) is sufficient.

**Please comment below and be prepared to share your comments in class:**

5. What section(s) of the Women in the Trades module provided you with the greatest insight on OH&S issues faced by Women in the Trades and why?

*For Questions 6 through 9, please indicate in the spaces provided under each section whether you:*

1	2	3	4	5	6	7
<b>Strongly Agree</b>	<b>Agree</b>	<b>Somewhat Agree</b>	<b>Somewhat Disagree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>I have no opinion about the statement.</b>

**Regarding the Labor Perspective Module:**

6. \_\_\_ Overall, the Labor Perspective module enhanced my ability to meet the course learning objectives.
7. \_\_\_ The module was organized in a logical manner.
8. \_\_\_ The Labor Perspective module assignment heightened my awareness of occupational health and safety issues for workers
9. \_\_\_ The amount of time to complete this module (1.5 hours to go through the content online) is sufficient.

**Please comment below and be prepared to share your comments in class:**

10. What section(s) of the Labor Perspective module provided you with the greatest insight on OH&S issues faced by workers and why?

**Optional comments:**

Please suggest specific ways to improve the Internet modules used in this course.

List any other comments you have about the use of Internet capabilities for this course.

*Thank you! Please hand in this evaluation December 9, 2003.*

