

## ***HLS 453 – Occupational Health (3 Hrs)***

***(also cross-listed with ES 455 and with MPH 553)***

New Mexico State University  
College of Health and Social Services  
Department of Health Science

This is a Web-CT course. All enrolled students may access the on-line portion of the course at <http://salsa.nmsu.edu/>.

### ***INSTRUCTOR***

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### ***OFFICE HOURS***

By appointment.

### ***COURSE DESCRIPTION***

Identification, control, and prevention of occupational diseases and injuries.

### ***PREREQUISITES***

HLS 453 – Junior or senior standing  
MPH 553 – none  
ES 455 - Junior or senior standing

### ***REQUIRED TEXTBOOKS***

To order your textbooks, please go to: <http://www.nmsubookstore.com/nmsu/>

1. Occupational Health, Levy, Lipp, Binding Paperback, Copyright 2006, Edition 5, ISBN 0-7817-5551-4
2. 2008 TLVs & BEIs (American Conference Of Governmental Industrial Hygienists, Misc Binding, Paperback, Copyright 2008, ISBN 1-882417-79-8 (if you have an earlier edition, that is fine, it does not have to be 2008)

## ***COURSE OBJECTIVES***

1. Identify basic methods utilized in the recognition, evaluation and control of hazards in the workplace;
2. Specify the role of occupational health professionals in the prevention of disease states in the occupational setting;
3. Identify various occupational diseases, their causes and their effects on the body;
4. Specify the role of regulatory agencies in their efforts to provide standards for the protection of employees;
5. Demonstrate basic skills in quantifying exposures to occupational hazards as a means to minimize employee risk.

## ***GRADING SCALE AND WEIGHTING***

There will be 19 quizzes at 20 points each for a total of 380 possible points plus 11 homework worth a total of 324 points for a grand total of 704 points possible for the course. Practice problems will not be graded; rather they are intended to assist you in preparing for the quizzes.

- A 90-100%
- B 80-89%
- C 70-79%
- D 60-69%
- F < 60%

## ***ADA STATEMENT***

If you have or believe you have a disability and would benefit from any accommodations, you may wish to self-identify by contacting the Services for Students with Disabilities (SSD) Office located in Corbett Center room 224 (phone: 575-646-6840); TTY 575-646-1918 to register. If you have already registered, please make sure that your instructor receives a copy of the accommodation memorandum from SSD within the first two weeks of classes. It is your responsibility to inform either your instructor or an SSD representative in a timely manner if services/accommodations provided are not meeting your needs. Instructors will receive specific written guidelines for appropriate accommodations for individual students from the SSD office. No student will be given accommodations for disabilities unless SSD has requested these specific accommodations for her/him.

If you have a condition which may affect your ability to exit safely from the premises in an emergency or which may cause an emergency during class, you are encouraged to discuss any concerns with the instructor and/or Mr. Michael Armendariz, SSD Coordinator.

Please call Mr. Armendariz, SSD Coordinator, at 575-646-6840 with any questions you may have on student issues related to the Americans with Disabilities Act (ADA) and/or Section 504 of the Rehabilitation Act of 1973. All medical information will be treated confidentially.

Please contact Mr. Jerry Nevarez, Director of Institutional Equity, at 575-646-3635 with any questions you may have about NMSU's Non-Discrimination Policy and complaints of discrimination, including sexual harassment.

## ***COURSE OUTLINE***

1. Overview of Occupational Health and Industrial Hygiene
2. Governmental Regulations
3. Threshold Limit Values
4. Industrial Toxicology
5. Lungs
6. Particulates
7. Gases and Vapors
8. Eyes
9. Ears

- 10. Noise
- 11. General (Dilution) Ventilation
- 12. Ergonomics
- 13. Biological Hazards
- 14. Skin
- 15. Industrial Dermatoses

- 16. Ionizing Radiation
- 17. Non-ionizing Radiation
- 18. Hazard Communication
- 19. Temperature Extremes

## **COURSE CALENDAR AND READING ASSIGNMENTS**

**PLEASE NOTE: The due dates (below) are the absolute latest deadlines. All quizzes and homework are due by 4 pm of the due date specified. No late work will be accepted, no exceptions. Please plan to WORK AHEAD. You may turn in any assignment EARLY. All quizzes are open NOW. All homework assignment drop boxes are open NOW. Please, please, please – work ahead, stay ahead!!**

DUE DATES FOR QUIZZES AND HOMEWORKS	LECTURE	QUIZ	TOPIC	PRACTICE PROBLEMS (not graded)	HOMEWORK (graded)	CHAPTER READING SUGGESTIONS
9/11	1	1	Overview of Industrial Hygiene			1, 2, 6-9
9/18	2	2	Government Regulations			3
9/25	3	3	Threshold Limit Values	Practice Problems #1	TLV Homework	
10/2	4	4	Industrial Toxicology		Tox Homework	13, 20, 29, 30
10/9	5	5	Lungs			25
10/14	6	6	Particulate		Particulate and Lungs Homework	17
10/16	7	7	Gases and Vapors	Practice Problems #2	Solvents Homework	
10/21	8	8	Eyes			
10/23	9	9	Ears			
10/28	10	10	Noise	Practice Problems #3	Noise Homework	14A, 14B, 27
10/30	11	11	General (Dilution) Ventilation	Practice Problems #4	Ventilation Homework	18
11/4	12	12	Ergonomics		Ergonomics Homework	11, 22, 23
11/6	13	13	Biological Hazards		Biological Hazards Homework	15
11/11	14	14	Skin			
11/13	15	15	Industrial Dermatoses		Industrial Dermatoses Homework	28
11/18	16	16	Ionizing Radiation			14D
11/20	17	17	Non-ionizing radiation			14D
12/2	18	18	Hazard Communication		Hazard Communication Homework	5
12/4	19	19	Temperature Extremes		Temperature Extremes Homework	14C

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