4 semester hours (1- hr lecture: 8:30 – 9:20 M, W, F; 3-hr lab: Tues 1:30-4:20 and Thursday 12:00 – 2:50 @ BNR-14 IH Lab)

Students with physical, sensory, emotional, or medical impairments may be eligible for reasonable accommodations in accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973. All accommodations are coordinated through the Disability Resource Center (DRC) in Room 101 of the University Inn, 797-2444 voice, 797-0740 TTY, or toll free at 1-800-259-2966. Please contact the DRC as early in the semester as possible. Alternate format materials (Braille, large print or digital) can be made available with advance notice.

Fall semester 2017

Room: BNR 314

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Hr.	Day	Date	Lecture Topic	Lec	Spkr.	Book	Laboratory Topic
1	M	Aug 28	Course Organization, ABET accreditation, Intro, and History	1	JF		Thursday 8/31
2	W	Aug 30	Regulations and Standards and Report Writing	2	JF		Lab 1: Practice Problems
3	F	Sep 1	Personal Protective Equipment	3	JF		interpreting standards
	М	Sep 4	Monday Sep 7: Labor Day (No Class)				Tues 9/5 and Thursday 9/7
4	W	Sep 6	Chemical Protective Clothing	4	JF		Lab 2: Mandatory Respirator
5	F	Sep 8	Respirators – Principles	5	JF		Lab (Qualitative)
6	М	Sep 11	Respirators – Selection	6	JF		Thursday 9/14
7	W	Sep 13	Respirators – Programs and Admin Controls	7/8	JF		McWane Video (Only extra
8	F	Sep 15	No class – John gone				credit opportunity)
						•	
9	М	Sep 18	Admin Controls and Internship Requirements and Discussion	8/9	JF		Tues 9/19 &Thursday 9/21
10	W	Sep 20	Epi, Tox, and Review of Standards (PELs, TLVs, STEL, C, skin)	10	JF		Lab 3: Mandatory Respirator
11	F	Sep 22	FIRST ONE-HOUR EXAM (Lectures 1-8)		JF		Lab (Quantitative)
						•	
12	M	Sep 25	Organic Solvents	11	JF		Thursday 9/28
13	W	Sep 27	Metals	12	JF		Lab 4: ACGIH TLV Book Lab
14	F	Sep 29	Dusts and Pneumoconiosis	13	JF		Exercise
15	М	Oct 2	Biological Hazards	14	JF		Thursday 10/5
16	W	Oct 4	IAQ	15	JF		Lab 5: Carcinogen and other
17	F	Oct 6	Dermal Exposures, and Dermatoses	16	JF	Ch. 1,25,26	Toxicity References
					I		
18	М	Oct 9	Pesticides	17			No Labs
19	W	Oct 11	SECOND ONE-HOUR EXAM (Lectures 9-15)		JF		Utah Conference on Safety &
20	F	Oct 13	No Class – Utah Conference on Safety and Industrial Hygiene				- IH Oct 11-13
	-		,				
21	М	Oct 16	Recognition of Health Hazards and Quarrying and Mining	18	JF	Ch. 25-26	
22	W		Quarrying and Mining Continued	19	JF	Ch. 25-26	No Lab
23	Th	Oct 19	Quarrying and Mining Continued	19	JF	Ch. 27 & 2	Thursday 10/21
	F		Fall Break – No Class, attend class on Thursday				Due to Fall Break
			,				
24	М	Oct 23	No Class		JF	Ch. 7-8	Thursday 10/26 @ 12:30
25	W	Oct 25	Smelting Process, and Aluminum, Iron, and Steel Production	20	JF	Ch. 9,10, 22	FT 1: 3 rd Gen Machine
26	F	Oct 27	Saved slot for a guest speaker		JF	Ch. 11-12	1435 North 200 West
			J	-			
27	М	Oct 30	Metal Fabrication with Foundry and Forging	21	JF		Thursday 11/2 @12:30
28	W	Nov 1	Metal Machining, Welding, and	22	JF		FT 2: Casper Ice Cream
29	F	Nov 3	Soldering THIRD ONE-HOUR EXAM (Lectures 16-21)		JF		11805 N 200E Richmond, UT
	1	-	(1	
30	М	Nov 6	Heat Treating and Nondestructive Testing	23	JF		Thursday 11/9 @12:30
31	W	Nov 8	Electroplating and Thermal Spraying, and Paint	24	JF	Ch. 13-15, 20	FT 3: TTM Circuit Boards
32	F	Nov 10	Abrasives and Abrasive Blasting, and Acid and Alkali Cleaning	25	JF	Ch. 3, 30, 4	710 N 600 W Logan, UT
52	<u>'</u>	7107 10	as a star ribrastro Blasting, and ribra and rindin Ordaning		31	511. 5, 50, T	20. 7.27

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33	М	Nov 13	Metal Degreasing, Grinding, Polishing, Buff	26	JF	Ch. 5-6	Thursday 11/16
34	W	Nov 15	Chemicals Processing and Acids	27	JF	Ch. 16, 19	FT 4: Vulcraft
35	F	Nov 17	Microelectronics	28	JF	Ch. 23	1875 Promontory Rd Brigham City, UT
		T					
36	M	Nov 20	FOURTH ONE-HOUR EXAM (Lectures 22 – 28)		JF		Thursday 11/23
	W	Nov 22	Thanksgiving (no class)				No Lab
	F	Nov 24	Thanksgiving (no class)				NO Lau
						,	
37	М	Nov 27	Petroleum	29	JF	Ch. 17	Thursday 11/30
38	W	Nov 29	Rubber and Plastics	30	JF	Ch. 18	FT 5: NUCOR Steel,
39	F	Dec 1	Asbestos and construction	31	JF	Ch. 28	Plymouth, UT
40	М	Dec 4	Ergo 1	32	JF		Thursday 12/7
41	W	Dec 6	Ergo 2	33	JF		Lab 6: Ergo Lab
42	F	Dec 8	Ergo 3 – Don Bloswick and Final Review	34	DB		Don Bloswick
43	М	Dec 12	Finals Week: Comprehensive Final Exam: Monday 7:30 AM – 9:20 AM		JF		Good Luck

Course Description: Review of industry processes to learn how they work to help ID future hazards associated with these types of industries.

I. Format: Lecture and discussion

Field Trips and Labs (Lab/Field Trip fee of \$75 to cover IH equipment maintenance costs and field trip costs)

Short Reports for each field trip and required Lab assignments

4 Exams and a Comprehensive Final

II. Course Content and Area of Emphasis

Industry definitions and terms

Discussion of specific industry hazards Site visits to identify real workplace hazards

III. Contact Info: Instructor: John Flores (email: john.flores@usu.edu) Office Phone: 797-8194; Cell 764-5487

Office: BNR 321; Office Hours – To be posted on door, but if I'm there just knock

VIII. Required Text: Recognition of Health Hazards in Industry, a review of materials and processes by William A. Burgess

The Occupational Environment – Its Evaluation and Control – AIHA Press

VIII. Grading:

4 1-hr exams worth 100 points each
Final exam worth 300 points (mandatory)
5 Field Trips, 10 points/field trip
5 mini-reports, 20 points each
Lab attendance and work assignments, 25 pts each for 6 labs
Total

400 pts
50 pts
100 pts
150 pts
1000 pts

X. Determination of Final Grade:

Grading: 40% Exams: 10% Exam 1, 10% Exam 2, 10% Exam 3, 10% Exam 4,

30% Labs/Field Trips: Labs/FT consist of attendance and Assignment or Report

30% Final Exam

Approximate grading scale: A: $\geq 93\%$; A-: $\geq 90\%$; B+: $\geq 87\%$; B: $\geq 83\%$; B-: $\geq 80\%$; C+: $\geq 77\%$; C: $\geq 73\%$; C-: $\geq 70\%$;

D+: \geq 66%; D: \geq 60%; \geq 60% is required to pass.

XII. Field Trips

We will have 5 scheduled field trips. I will get a bus for the trips outside of Cache Valley, but you will drive or carpool for those within the valley. Each field trip is worth 10 points

XIII. Field Trip Reports

5 reports are required at 20 pts each

Purpose of reports: To determine what hazards stood out in your mind, and what next steps as an IH you want to take Include at least 3 paragraphs. Report should be 1-2 pages, more than 2-pages will not get you a better grade, and you might even lose points. Most managers won't take the time to read more than a 2-page report.

Paragraph 1: brief summary of what the company does (Background or Introduction)

Paragraph 2: ID the 5 major hazards you noticed (Findings or Observations)

Paragraph 3: What are the next steps to address each hazard? (Recommendations or Conclusion)

XIV. One extra credit opportunity that can be worth up to 30 pts.

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