# Fire Protection and Safety Engineering Technology Program

545 Engineering North Stillwater, Oklahoma 74078-8016 (405) 744-5721

# FPST 2343 - Elements of Industrial Hygiene

# Laboratory Exercise - Standard Threshold Shift

#### Scenario:

You are an intern at a Fortune 500 manufacturing company. Your supervisor has asked you to evaluate a male employee's right-ear audiograms and determine if an OSHA recordable hearing loss has occurred and, if so, in which year. Assume consistent repeated tests and work related noise exposure.

### Assignment:

Note: Excel may be useful in performing calculations. Collaboration with your group members is acceptable for checking calculations; turn in individual letters.

## Steps:

- 1. Determine the baseline year
- 2. Determine average loss by year over the required frequencies
- 3. Determine age-correction factors for suspect year(s)
- 4. Determine adjusted average hearing loss from baseline
- 5. Determine total average hearing loss
- 6. Make recordability determination

Audiometric Test Results - dB below threshold					
Age	Audiometric Test Frequency (Hz)				
	1000	2000	3000	4000	6000
31	0	10	5	10	0
32	5	0	0	5	5
33	5	5	0	10	0
34	5	0	5	15	5
35	10	5	15	15	10
36	5	10	20	15	10
37	10	17	35	25	20

Answer the questions in the Canvas Quiz for Lab 3.