

<b>Department of Industrial Engineering</b>			
<b>Safety Eng'g &amp; Human Factors Lab (65589)</b>			
<b>Total Credits</b>	<b>1</b>		
<b>major compulsory</b>			
<b>Prerequisites</b>	P1 : Safety Eng'g & Human Factors (65480) P11Synch. : Safety Eng'g & Human Factors (65480)		
<b>Course Contents</b>			
This lab includes some experiments that simulate the safety and health conditions to which a labor in a factory may be exposed, these experiments include muscle fatigue test, anthropometry test hearing & noise test and so on.			
<b>Intended Learning Outcomes (ILO's)</b>		<b>Student Outcomes (SO's)</b>	<b>Contribution</b>
1	An ability to analyze the data resulted from experiments , carry out simple mathematical calculations , and conduct the labs experiments.	B	30 %
2	An ability to work within a team	D	10 %
3	Ability to suggest practical solutions to safety problems through experiments and projects	E	20 %
4	Ability to prepare a weekly report	K	40 %
<b>Textbook and/ or References</b>			
1. Handout and sheets. 2. Other needed references will be determined during the course.			
<b>Assessment Criteria</b>		<b>Percent (%)</b>	
Mid. Term Exam		20 %	
Reports		40 %	
Final Exam		40 %	
<b>Course Plan</b>			
<b>Week</b>	<b>Topic</b>		
1	Anthropometric Measurements - part A		
2	Anthropometric Measurements - part B		
3	Muscle fatigue test		
4	Steadiness test		
5	Maximum Voluntary Lifting Capacity		
6	Heart Rate & Blood Pressure as a Physical Work Load Measurement.		
7	Industrial noise		
8	Hearing sensitivity test		
9	Health & toxic substances		
10	Air quality assessment		
11	Level of Illumination		
12	Heat stress test.		
13	Flue gas test		