

IENG 564 - Industrial Ergonomics Fall 2014

Description: This course focuses on the Physical Ergonomic of industrial processes/methods and is primarily designed to provide students with a technical foundation to analyze, design and develop human-technological system with a primary emphasis on the humans

Instructor: Ashish D. Nimbarte, Ph.D., Assistant Professor, IMSE Department

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Office Hours: 12:30 pm to 1:30 pm, MW or by appointment

Lectures: 4:00 pm to 5:15 pm, MW, 105 Mineral Resources Building

Text Used: D. B. Chaffin, Gunnar B. J. Andersson, and B. J. Martin (2006) Occupational Biomechanics, Wiley-Interscience; 4th edition.

C.A. Phillips (1999) Human Factors Engineering Wiley-Interscience; 1st edition.

M. M Ayoub and A. Mital, (1990) Manual Materials Handling, Taylor & Francis

References: Current technical articles and library sources.

Prerequisites: IENG 360

Final grade calculation:

Homework, Quizzes, Assignment	20%	90-100 %	A
Exam 1	20%	80-89%	B
Exam 2	20%	70-79%	C
Research paper presentation	10%	60-69%	D
Class participation	5%	<59%	F
Final Exam	25%		
	100%		

No late homework/reports are accepted. No make-up exams are given.

Statement on Attendance: Student attendance is mandatory unless excused by the instructor. The basis for an excused absence will follow University and IMSE policy.

Academic Dishonesty: Acts of academic dishonesty such as cheating or plagiarism will result in a failing grade (a grade of zero) and will be reported to the student's department and college.

Social Justice: West Virginia University is committed to social justice. I concur with that statement. I expect to foster a nurturing learning environment that is based upon open communication, mutual respect, and non-discrimination. Our University does not discriminate on the basis of race, sex, age, disability, veteran status, religion, sexual orientation, color or national origin. Any suggestions as to how to further such a positive and open environment in this class will be appreciated and given serious consideration.

Disability Accommodation: If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class, you must make appropriate arrangements through Disability Services (304-293-6700). They will identify the nature of the accommodation your disability requires and inform me of appropriate accommodations.

Week	Course Topic	HW	Exam	Final
1	Industrial Ergonomics - Introduction	1	1	
2	Workload Assessment of Static Exertions			
3	Labor Day Holiday Workload Assessment of Static and Dynamic Exertions	2		
4				
5				
6				
7	Three Dimensional Modeling of Static Strength	3	2	
8	Exam 1 (8-Oct-14)			
9	Fall break			
10	Working Postures & Kinematics			
11	Workload Analysis using Neuromuscular Activity	4		
12				
13				
14	Exam 2 (19-Nov-14)			
15	Thanksgiving Break			
16	Industrial Ergonomics Research Methods Class presentations			
17	Final exam (17-Dec-14; 11:00 am to 1:00 pm)			

