IENG 564 Industrial Ergonomics Fall 2018

INSTRUCTOR: XIAOPENG NING

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CLASS MEETING: Tuesday 5:30pm-8:20pm

CLASS LOCATION: MRB 107

OFFICE HOUR: By appointment

Textbook: Chaffin: Occupational Biomechanics (4th edition).

CLASS FORMAT: Lecture, Homework, Labs, Presentations, Exams,

Group/individual project(s)

The instruction of this course will be primarily through lectures, although open class discussions will be strongly encouraged. Students will be expected to have reviewed the relevant material for each class before that class session begins.

Sufficient (and minimal) individual and group assignments will be assigned throughout the semester. Two MID-TERM exams will be given to gauge your progress and overall aptitude in this field.

Grade Allocation

Exam #1:	20%
Exam #2:	20%
Final project:	30%
Assignment:	20%
Performance:	10%

Grand Total: 100%

Grades will be assigned based on 10% delineations (A > 90%, 89% > B > 80%, etc.). **REMEMBER** that 10% of your grade is based on (my perception of) your participation during the semester, which includes your attendance (which will not be taken), your participation in class discussions, and your professionalism.

Class	Lecture Topics	
Meeting		
21-Aug	Fundamental Concepts of Industrial Ergonomics	
28-Aug	Basic Human Anatomy	
4-Sep	Anthropometry & Basic stat	
9-Sep	Muscle physiology/ Metabolism	
18-Sep	Low Back Biomechanics	
25-Sep	MIDTERM #1	
2-Oct	Travel	
9-Oct	Risk assessment tools	
16-Oct	Passive Surveillance	
23-Oct	Control Strategies and Designs	
30-Oct	Hand/Wrist Biomechanics/Hand Tool Design	
6-Nov	MIDTERM #2	
13-Nov	Biomechanical Models	
20-Nov	Fall Recess	
27-Nov	Student presentation	
4-Dec	Final Report Due	

Student project

Final project will account for 30% of the total grade. This semester the topic of the projects will be in the general area of industrial ergonomics, which may require the use of laboratory equipment such as EMG and motion tracking. Other data analysis software such as Microsoft Excel and MATLAB may also be required.

Cheating

"Cheating: If you cheat (copy someone else's answers on a test, knowingly allow someone to copy your test, use someone else's term paper, etc.), then you can receive a failing grade in the class and could be subject to further disciplinary measures". (Mountie, 1998, p. 15)

"Plagiarize ... vb.. to steal and pass off (the ideas or words of another) as ones own: use (a created production) without crediting the source $\sim vi$: to commit

literary theft: present as new and original an idea or product derived from an existing source" (Webster's New Collegiate Dictionary, 1979, p. 870)

In order to protect yourself from being accused of cheating you must reference (cite) any thought, idea, or fact that is not your original thinking. This means noting in the body of your paper (project report, etc.) the source of the fact or idea, and, if you are quoting a source directly, including the page number where the quote may be found. In this course we will use the Publication Manual of the American Psychological Association as a guide for citing works (APA, 1984).

To further protect yourself (and your grade), you must be sure that any work you hand in contains a substantial amount of your own thinking. It is not acceptable to paraphrase another's work (even if you refer to that work and give the author credit) and submit it as your work. Originality on your part is required to pass this course.

Social Justice

West Virginia University is committed to social justice. I concur with that commitment and expect to maintain a positive learning environment 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 further such positive and open environment in this class will be appreciated and given serious consideration.

If you are a person with a disability and anticipate needing any type of accommodation in order to participate in class, please advise me and make appropriate arrangements with Disability Services (293-6700).