

**Western Kentucky University**  
**School of Engineering and Applied Sciences**  
**MFGE 310: Ergonomics and Safety**

**Instructor:** Bryan Reaka  
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**Office:** EST 209  
**Office Hours:** by appointment  
**Phone:** 270-745-7032  
**Pre-requisites:** Math 116 with a grade of "C" or better, or Math 117 or higher  
**Credit:** 3 credit hours

**NOTE:** When beginning the course send the instructor an e-mail indicating your enrollment in the course.

**Course Description:** People-machine interaction, including an introduction to the relevant underlying human sciences. The interaction of how these issues relate to safety in the workplace will be elaborated upon. Course Fee.

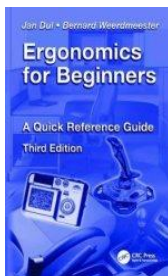
**General Course Goals:**

Upon completion of the course students should be able to:

- Describe What OSHA is and its importance in the workplace.
- Identify Safety hazards within a work area and evaluate potential solutions.
- In an assigned workplace, investigate the impact of environmental conditions on ergonomic design and human performance
- Based on information, operation, and control, discriminate ergonomic processes and product designs.
- Assess the ergonomic characteristics for a given workspace.

**Major Topics to be covered in the Course:**

- Accident costs
- Workers Compensation
- Toxic Substances
- Noise and Vibration
- Bloodborne Pathogens
- Violence in the Workplace
- Emergency Preparation
- Accident investigation



**REQUIRED TEXTS:**

- Dul, Jan and Weerdmeester, Bernard (2008), Ergonomics for beginners, A quick reference guide, 3<sup>rd</sup> edition, CRC Press
- ISBN 13: 978-1-4200-7751-3
- ISBN: 1-4200-7751-1

**ATTENDANCE:** Class attendance is important, even though this is an online/on demand course you will need to check Blackboard on a regular basis for lectures, assignments and discussion boards. Video lectures and class discussions are meant to supplement not replace reading assignments. Basically everything that is discussed/ presented is important to your learning experience and success in the course.

**Grading:** The factors to be considered in determining grades and the specific weight to be assigned to each of these factors is as follows:

Quizzes – 32%

Test #1 – 15%

Test #2 – 15%

Test #3 – 15%

Test #4 – 15%

Test Final Exam – 8%

Quizzes – will include material from lectures and videos presented on the topic.

All graded tests will be taken at an **approved testing center**. These tests will need to be scheduled during the open time for the test as set forth in the course calendar by YOU the student.

- If you are on/ near campus this is the DELO Testing Center.
- If you are not on/ near campus then the DELO Testing Center will be in contact with you to inform you of the process

Final Exam- will be comprehensive covering the materials from the lectures that I have recorded.

**GRADES:**

A – 100%-92%

B – Less than 92 - 84%

C – Less than 84 -74%

D – Less than 74% - 72%

F – Less than 72%

### **Title IX Misconduct/Assault Statement**

*Western Kentucky University (WKU) is committed to supporting faculty, staff and students by upholding WKU's Title IX Sexual Misconduct/Assault Policy (#0.2070) at*

*<https://wku.edu/eoo/documents/titleix/wkutitleixpolicyandgrievanceprocedure.pdf> and*

*Discrimination and Harassment Policy (#0.2040) at*

*[https://wku.edu/policies/hr\\_policies/2040\\_discrimination\\_harassment\\_policy.pdf](https://wku.edu/policies/hr_policies/2040_discrimination_harassment_policy.pdf).*

*Under these policies, discrimination, harassment and/or sexual misconduct based on sex/gender are prohibited. If you experience an incident of sex/gender-based discrimination, harassment and/or sexual misconduct, you are encouraged to report it to the Title IX Coordinator, Andrea Anderson, 270-745-5398 or Title IX Investigators, Michael Crowe, 270-745-5429 or Joshua Hayes, 270-745-5121.*

*Please note that while you may report an incident of sex/gender based discrimination, harassment and/or sexual misconduct to a faculty member, WKU faculty are "Responsible Employees" of the University and **MUST** report what you share to WKU's Title IX Coordinator or Title IX Investigator. If you would like to speak with someone who may be able to afford you confidentiality, you may contact WKU's Counseling and Testing Center at 270-745-3159.*

### **ADA Accommodation Statement**

*In compliance with University policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact the Student Accessibility Resource Center located in Downing*

Student Union, 1074. SARC can be reached by phone number at 270-745-5004 [270-745-3030 TTY] or via email at [sarc.connect@wku.edu](mailto:sarc.connect@wku.edu). Please do not request accommodations directly from the professor or instructor without a faculty notification letter (FNL) from The Student Accessibility Resource Center.

**Ogden Student Course Attendance Statement- this is a copy and paste that is required for the syllabus**

The faculty and staff of Ogden College of Science and Engineering are committed to providing you with learning experiences and opportunities. You must assume ownership of your education and be an active participant in the classroom and laboratory to take advantage of these opportunities. **Active participation requires you to attend.** Scientific studies have shown that attendance during scheduled classroom and laboratory meetings is directly correlated to your performance on assignments and exams and the potential to earn higher grades. Additionally, if you do not regularly attend class, you are missing important information about course topics, due dates, and assignment details that are crucial to your success in the course. Therefore, as a student enrolled in an Ogden course, you are expected to attend every class meeting and to inform your instructor regarding the reasons for any absences as soon as practical. **Your instructor may incorporate class attendance/participation as part of the grading criteria.**

**EMAIL**

All correspondence for this course will be to your WKU student e-mail account. Email will be one of our methods of communication for this class. Remember that anything you write could be read by others. Each email should deal with one subject or one assignment. Each email or assignment should be concise but include all requested information. For email SUBJECT, please use the following: **Course Last Name <short title>**. As an example, if your name is Hussain Williams, you are taking MFGE 310, and you want to write me and ask me a question about quiz on Emergency Preparation, then your email SUBJECT should be: MFGE 310 Williams <Emergency preparation Quiz question>

**RECORDED PRESENTATIONS, POWERPOINTS and VIDEO accompaniment for Sections** will be open when previous assignments are completed.

**Review questions:** These will not be collected or graded. The answers will be available after the “due date” and upon your submission of theses as an assignment. These are suggestions for material that you as the student will be responsible for to successfully matriculate through the course. The information from these questions will be included in quizzes and exams.

**Academic Dishonesty**

“Students who commit any act of academic dishonesty may receive from the instructor a failing grade in that portion of the coursework in which the act is detected or a failing grade in the course without possibility of withdrawal.”

**COMPUTER BASED LEARNING:** This is a junior level course in college it will require a good deal of work. To do well in this course you need to know how to use your computer and the internet. Some of the problems in this course can be alleviated ahead of time by reading the instructions, paying attention to deadlines, and checking course material. **The computer that you use must have good internet connection and be completely functional. It is your responsibility to have a computer that works. My computer crashed/ I hit the wrong button IS NOT a valid excuse for accidentally submitting a quiz.** The way this course is set up one mishap like this would not be devastating to one's grade in the course. You will have to have the ability to download and view videos to be able to succeed in this class.

**NOTE: The server on which this class is located is backed up every day during specified times (usually early morning hours). If you try to access this site and cannot, please try again several hours later. Be sure to save copies of all assignments that you submit. There may be a glitch in the system when I am retrieving them, so having a backup is always a good idea.**