Course Syllabus

OMT 343 Occupational Safety/Ergonomics Fall 2024

Course Number: 69173 and 69189

Credits: 3

Prerequisites: None

Faculty: Michael J. Kuzel, P.E., CHFP, RSP2BI

Email address: mjkuzel@asu.edu

Office hours: Virtual, arranged by email.

Textbook: Occupational Safety and Health for Technologists, Engineers, and Managers, 10th edition,

David Goetsch (author). Digital copy available for rent: BOOK RENTAL

**** NOTE **** I highly recommend renting the textbook for less than \$40 for the semester.

Online Course

This is an on-course. You will be required to use Canvas to complete this course.

This class will be offered asynchronously.

Course Time Commitment

This three-credit course requires approximately 135 hours of work. Please expect to spend around 18 hours each week preparing and actively participating in this course.

Catalog Description

Health and safety movement, accident theories and effects, OSHA standards and liability, safeguarding, hazards, workers' compensation, ergonomics, and safety.

Course Overview

The course content will introduce you to the history of the safety movement and foundational topics in occupational safety. Building on a foundation of basic concepts, specific topic areas, such as manual material handling, safeguarding, thermal hazards, etc..., will be covered. Finally, the course will review chapters dedicated to more recent theories on promoting safety at a broader level within organizations.

Learning Outcomes

At the conclusion of this course, the student is expected to have a foundational ability to:

- discuss and present basic concepts of Occupational Safety and Ergonomics, including the effects and the causes of injurious events;
- explain the rationale for having laws and regulations in the workplace, including federal safety standards (OSHA) and consensus standards;
- o identify hazards and risks in the workplace, including those associated with the environment, equipment, tasks, and products;
- o discuss the process of educating employees and supervisors on methods that address factors associated with injuries and emotional stress; and
- o assess management methods for improving the overall health and safety of the workplace.

Course Evaluation

Students are expected to complete the course evaluation. The evaluation provides valuable information to the instructor and the college that can be used to improve student learning.

Students will be notified when the online evaluation form is available.

Syllabus Disclaimer

The syllabus is a statement of intent and serves as an implicit agreement between the instructor and the student. Every effort will be made to avoid changing the course schedule but the possibility exists that unforeseen events will make syllabus changes necessary. Please check your ASU email and the course site often.

Computer Requirements

This course requires a computer with Internet access and the following:

- A web browser (Chrome, Internet Explorer, Mozilla Firefox, or Safari)
- Adobe Acrobat Reader (free)
- YouTube
- Computer speaker and microphone (optional)

Course Topics, Schedule & Grading

Content for instruction of course materials will include the textbook and supplemental readings from journals and industry publications that will be provided by the professor. Assessment of learning will be based on weekly quizzes, postings on discussion boards, and individual projects.

1. Submitting assignments

- Due dates are provided in this Syllabus.
- All assignments, unless otherwise announced, are to be submitted to the designated area in Canvas. Please do not submit an assignment via email.
- Notify the instructor before an assignment is due if an urgent situation arises and the assignment will not be submitted on time.
- Please follow the appropriate University policies to request an accommodation for religious practices or to accommodate a missed assignment due to University-sanctioned activities.

2. Weekly Folders

- There is a folder for each week of the session (7 weeks).
- The weekly folder will open every Wed. and contains the summary slides for review, the discussion board postings, and the guiz for that week.
- Students may read ahead, based on the syllabus schedule but will not be given advanced access to the discussion boards for posting.

3. Quizzes:

- Quizzes will be 25 questions, True/False or Multiple Choice (1 pts. each).
- Quizzes will cover content from the assigned textbook readings and all the exam answers are in the textbook.
- Quizzes will be posted at 12:00 AM Thursday and must be completed by 11:59 PM Sunday.
- A guiz must be finished once initiated, and questions are presented one at a time.
- Each quiz may be retaken once for an improved grade.
- A missed quiz is a 0 grade.
- Exams are individual assignments and collaboration is prohibited.
- There will be no cumulative final exam.

4. Class Discussions:

- Forum discussion questions are posted weekly to make this online class interactive and engage students in conversations about course content, principles of occupational safety and ergonomics, and encourage a broader view of the world.
- The overall course grading is heavily weighted on discussion posts. Completion of the discussion posts is required to achieve enough points to pass the course.
- A question(s) will be posted on Wednesday of each week.
- The first week (7 days) there will be two questions, with the first question posted on Wednesday and the second posted on Saturday.
- Discussion postings will close on Tuesday at 11:59 PM for that week.
- Students may be separated into groups for discussions and the groups will change weekly.

Read closely: To get full credit, 25 points, for the Discussion forum:

Each student shall have at least 1 individual response post to the question(s), 15 pts

At least 2 secondary responses to postings from another student, 5 pts each

- The discussion forum is intended to encourage your application of the reading material and/or supplementary assignments.
- Your response should be 150 + words and include a citation to the textbook, an assigned reading material, or sources acquired through independent research.
- Reductions in points will be taken for less meaningful responses, e.g., "I agree" is not an acceptable secondary response and will receive a 0 grade.
- I highly encourage using personal experience and/or introducing real-world examples.
- I will grade the content of your direct response more strictly than the secondary response.

5. Projects:

- A project, worth 25 points, will be assigned in the 2nd and 4th week.
- The project will require students to conduct research on a topic and provide a brief write-up of responses to questions.
- The second project will be presented in a discussion format to other students.
- More information on the project will be posted on these projects in the weekly folder.

Grading Procedure

- Grades reflect performance on assignments and adherence to deadlines.
- Exams are graded immediately.
- Discussion posts and assignments will be graded on a weekly basis.

Course points available

<u>ASSIGNMENT</u>	<u>NUMBER</u>	POINTS EACH	POINTS TOTAL
Exams	6	25	150
Discussions	8	25	200
Projects	2	25	50
Total Points			400

Grading by letter and percentage

<u>GRADE</u>	<u>PERCENTAGE</u>	POINTS TOTAL
Α	90 – 100%	360 - 400
В	80 – 89%	320 – 359
С	70 – 79%	280 - 319
D	60 – 69%	318 - 240
E/F	Below 60%	240 -

Grade Appeals

Grade disputes must first be addressed by discussing the situation with the instructor. If the dispute is not resolved with the instructor, the student may appeal to the department chair per the <u>University</u> Policy for Student Appeal Procedures on Grades.

Student Success

This is an online course. To be successful:

- check the course daily
- · read announcements
- · read and respond to the course email messages as needed
- · complete assignments by the due dates specified
- · communicate regularly with your instructor and peers
- · create a study and/or assignment schedule to stay on track

Drop and Add Dates/Withdrawals

This course adheres to a compressed schedule and may be part of a sequenced program, therefore, there is a limited timeline to <u>drop or add the course</u>. Consult with your advisor and notify your instructor to add or drop this course. If you are considering a withdrawal, review the following ASU policies: <u>Withdrawal from Classes</u>, <u>Medical/Compassionate Withdrawal</u>, and a <u>Grade of Incomplete</u>.

Communicating With the Instructor

This course uses a discussion board called "Hallway Conversations" for general questions about the course. Prior to posting a question, please check the syllabus, announcements, and existing posts. If you do not find an answer, post your question. You are encouraged to respond to the questions of your classmates.

Email and Internet

ASU email is an <u>official means of communication</u> among students, faculty, and staff. Students are expected to read and act upon email in a timely fashion. Students bear the responsibility of missed messages and should check their ASU-assigned email regularly.

All instructor correspondence will be sent to your ASU email account.

Class S	che	dule
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Week & Dates	Chapters from textbook	Topic of Instruction / Exam/ Project	
Ch 1 Safety and Health		Overview of Injuries & Fatalities in the	
Week 1 Ch 2 Accidents and Their Effects		workplace	
10/16 - 22	Ch 3 Theories of Accident Causes		
	Ch 6 The OSH Act, Standards and Liability	Laws and regulations	
10/16	Discussion 1 posted		
10/18	Discussion 2 posted	Discussion 1 posts due	
10/22		Discussion 2 posts due	
Week 2	Ch 10 Ergonomic Hazards	Protecting the Human in the System	
10/23 - 29	Ch 12 Safety and Health Training		
10/23 - 23	Ch 13 Workplace Violence		
10/23	Discussion 3 posted		
10/24 - 27	Exam 1	Ch 1 – 3, 6	
10/25	Project 1 Assigned	Finding Standards	
10/29		Discussion 3 due	
Mark 2	Ch 14 Mechanical Hazards	Assessment, prevention, and control of	
Week 3 10/30 – 11/5	Ch 15 Falling, Impact Hazards	hazard – Part I	
10/30 - 11/3	Ch 16 Temperature Extremes		
10/30	Discussion 4 posted		
10/31 – 11/3	Exam 2	Ch 10, 12, 13	
11/5		Discussion 4 due	
	Ch 17 Pressure Hazards	Assessment, prevention, and control of	
Week 4	Ch 18 Electrical Hazards	hazard – Part II	
11/6 - 12	Ch 19 Fire Hazards		
11/6	Discussion 5 posted		
11/7 - 10	Exam 3	Ch 14 - 16	
11/12		Discussion 5 due	
11/12		Project 1 due	
	Ch 22 Noise and Vibration	Unseen and 21st century hazards	
Week 5	Ch 23 Computers, Automation and Robots	, , , , , , , , , , , , , , , , , , , ,	
11/13 - 19	Ch 24 Bloodborne Pathogens		
11/13	Discussion 6 posted		
11/14 – 17	Exam 4	Ch 17 – 19	
11/15	Project 2 Assigned	The use of warnings (Ch. 9)	
11/19		Discussion 6 due	
Mastr C	Ch 27 Hazard analysis and safety management	Management of Safety and Health	
Week 6	Ch 28 Promoting Safety		
11/20 - 26	Ch 31 Safety Culture		
11/20	Discussion 7 posted		
11/21 – 24	Exam 5	Ch 22 – 24	
11/26		Discussion 7 due	
Week 7	Ch 8 Accident Investigation		
11/27 – 12/6	Ch 9 Warnings		
11/27	Discussion 8 posted		
12/2-6	Exam 6	Ch 27, 28, 31, 8, 9	
12/4		Discussion 8 due	
12/4		Project 2 due	

Student Conduct and Academic Integrity

ASU expects and requires its students to act with honesty, integrity, and respect. Required behavior standards are listed in the <u>Student Code of Conduct and Student Disciplinary Procedures</u>, <u>Computer</u>, <u>Internet</u>, and <u>Electronic Communications policy</u>, <u>ASU Student Academic Integrity Policy</u>, and outlined by the <u>Office of Student Rights & Responsibilities</u>. Anyone in violation of these policies is subject to sanctions.

Students are entitled to receive instruction free from interference by other members of the class. An instructor may withdraw a student from the course when the student's behavior disrupts the educational process per <u>Instructor Withdrawal of a Student for Disruptive Classroom Behavior</u>. Appropriate online behavior (also knows as netiquette) is defined by the instructor and includes keeping course discussion posts focused on the assigned topics. Students must maintain a cordial atmosphere and use tact in expressing differences of opinion. Inappropriate discussion board posts may be deleted by the instructor.

The Office of Student Rights and Responsibilities accepts <u>incident reports</u> from students, faculty, staff, or other persons who believe that a student or a student organization may have violated the Student Code of Conduct.

Prohibition of Commercial Note Taking Services

In accordance with <u>ACD 304-06 Commercial Note Taking Services</u>, written permission must be secured from the official instructor of the class in order to sell the instructor's oral communication in the form of notes. Notes must have the notetaker's name as well as the instructor's name, the course number, and the date.

Accessibility Statement

In compliance with the Rehabilitation Act of 1973, Section 504, and the Americans with Disabilities Act as amended (ADAAA) of 2008, professional disability specialists and support staff at the Disability Resource Center (DRC) facilitate a comprehensive range of academic support services and accommodations for qualified students with disabilities.

<u>Qualified students with disabilities may be eligible to receive academic support services and accommodations</u>. Eligibility is based on qualifying disability documentation and assessment of individual need. Students who believe they have a current and essential need for disability accommodations are <u>responsible for requesting accommodations</u> and <u>providing qualifying documentation</u> to the DRC. Every effort is made to provide reasonable accommodations for qualified students with disabilities.

Qualified students who wish to request an accommodation for a disability should contact the DRC by going to https://eoss.asu.edu/drc, calling (480) 965-1234 or emailing DRC@asu.edu.

To speak with a specific office, please use the following information:

Tempe Campus 480-965-1234 (Voice)	Polytechnic Campus 480-727-1165 (Voice)	
West Campus	Downtown Phoenix Campus and ASU Online	
University Center Building (UCB), Room 130	University Center Building, Suite 160	
602-543-8145 (Voice)	602-496-4321 (Voice)	