



To access COVID-19 information, please visit the [Stay Healthy Lions Webpage](#).

SCHB 430 – TAB 5 – HAZARDOUS MATERIALS
COURSE SYLLABUS: Fall 2022 - Term 1

INSTRUCTOR INFORMATION

Instructor: Kelli Taylor
Office Location: Online
Office Hours: Email or Telephone or Virtual by Appointment
Office Phone: N/A
University Email Address: Kelli.Taylor@tamuc.edu
Preferred Form of Communication: Email
Communication Response Time: 24 Hours (weekend may be delayed)

COURSE INFORMATION

Materials

This course has been designed using Open Educational Resources (OER). All materials are embedded within the course and are accessible via the internet. After taking the pretest, students are encouraged to bookmark, download, or save materials provided via the internet for use during quizzes, assignments, and projects in this class.

Supplemental Materials

Links and files will be provided in the document sharing tab within the course.

ORGANIZATION LEADERSHIP PROGRAM DESCRIPTION

The Bachelor of Applied Arts and Sciences in Safety and Health (SHCB) degree is a competency-based program that prepares innovative leaders for employment in an increasingly technological and global society. This program provides opportunities for students to receive credit for what they know and can do already, allows them to accelerate completion of their degree, and — because it is fully online — students are able to plan their study schedule around the rest of their day to complete the coursework.

COURSE DESCRIPTION

Study hazardous material problems in transportation, storage, and use of hazardous materials. Review chemical properties relating to specific reactions, engineering controls, and how to control materials in an emergency situation. Emphasis is placed on the role of pre-emergency planning, combating, coordinating resources, and controlling a hazardous materials incident.

STUDENT LEARNING OUTCOMES

Completion of this course provides the student with the knowledge to:

1. Define and respond to OSHA's requirements for worker training, safe work practices, labeling, proper storage procedures, and the limiting of employee exposure to hazardous workplace chemicals.
2. Apply the value of the Global Harmonized System (GHS) for chemical and product identification so that hazards and risks can be quickly mitigated when required.
3. Define signage and safe work practices for handling and transportation of compressed gases and flammable and combustible products.
4. Apply knowledge of the chemistry of workplace materials and chemicals to ensure workers are protected when handling them.
5. Apply the principles of the chemistry of workplace materials and chemicals to ensure workers are protected when handling them.
6. Apply the principles of chemistry in control of fires and explosions that may occur in the workplace.
7. Use Knowledge derived from the course in multiple hazardous materials handling scenarios and situations that may occur within the workplace, communities, and environment to protect life, the environment and assets and infrastructure.

REGULAR AND SUBSTANTIVE COURSE INTERACTION

As a general guide, students enrolled in a three semester hour course should spend one hour engaged in instructional activities and two to three hours on out-of-class work per week in a traditional semester. Students are expected to double this effort of engagement given that this course is being delivered in a seven-week term. Educational activities in this course are designed to ensure regular and substantive interaction between students and faculty to ensure that students are able to demonstrate competency.

COURSE REQUIREMENTS

Minimal Technical Skills Needed: Students will need reliable computer and internet access for this course. Students must be able to effectively use myLeo email, myLeo Online D2L, and Microsoft Office.

Instructional Methods: This course is an online course. To be successful in this course, all content and course modules should be read and reviewed. All assignments and quizzes (both graded and not graded) must be completed. Please contact the instructor by email for any assistance.

Email your instructor as soon as you complete your pre-test so the instructor can access and grade your work.

Student Responsibilities or Tips for Success in the Course: To be successful in this course, all content and course modules should be read and reviewed. All assignments and quizzes (both graded and not graded) should be completed. Please contact the instructor by email for any assistance.

ASSESSMENT

Students must achieve 80% or higher for the both the posttest and culminating project to demonstrate competency and pass the course.

Course Pre-test

The purpose of the pre-test is to provide a baseline understanding of your knowledge in this competency. The pre-test is required before you begin studying course materials. If you do not make at least 80% on the pre-test, students will be expected to complete assignments, quizzes, and other course content to prepare for the post-test and culminating project.

Content	Description	Value	Notes
Pre-test	This is the initial assessment in the course to provide a baseline understanding of a student's knowledge of the course content and competencies. Pretests are taken once and should be completed upon the first couple of days of a CBE academic term or entry into a course if a student is an accelerator.	100 points	Required before completing any other work in the course. The grade on the pre-test does not count in the final grade for this course.

Course Post-test

The end-of-course comprehensive exam that assesses student knowledge and understanding of major concepts, theories, processes, etc., in the course. A **score of 80% or higher is required** to demonstrate competency.

Content	Description	Value	Notes
Post-test	Measures your competency of learning outcomes through essay, short answer, and multiple-choice questions.	100 points	Required and you must score 80% or higher. You have up to three attempts. DUE: Last day of week 7, Friday by 11:59 PM CST

If you score less than 80% on the post-test, you will have an opportunity to review the material and retake the post-test two additional times. If the post-test score is less than 80% within three attempts, students will receive a grade of “F” in the course and will be required to retake the course in the new term. Students who fail the posttest should review feedback from the instructor before reattempting the posttest.

Culminating Project

The project assesses your knowledge of terms and the application of concepts presented in this course. A **score of 80% or higher is required** to demonstrate competency.

Content	Description	Value	Notes
Project	Measures your competency of learning outcomes the completion of a competency-based project.	100 points	Required and you must score 80% or higher. You have up to three attempts. DUE DATE if you want feedback for revisions: End of week 6. HARD DUE DATE: Last day of week 7, Friday by 11:59 PM CST

If students score less than 80% on the culminating project, they will have an opportunity to review the material and resubmit the project up to two additional times. If the culminating project is less than 80% within three attempts, students will receive a grade of “F” in the course and will be required to retake the course in the new term.

GRADING

A score of 80% or higher on both the Culminating Project and Posttest is required to demonstrate competency and receive credit for the course. The following items will be used to calculate the final grade in the course.

Item	Worth
Post-test 1	100 points / 15%
Post-test 2	100 points / 15%
Post-test 3	100 points / 15%
Post-test 4	100 points / 15%
Post-test 5	100 points / 15%
Culminating Project Attempt	100 points / 25%
Total	600

Grading Scale

A = 90%-100%

B = 80%-89%

F = 79% or Below

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are the technical requirements

Learning Management System (LMS) Requirements:

View the [Learning Management System Requirements Webpage](#).

LMS Browser Support:

Learn more on the [LMS Browser Support Webpage](#).

YouSeeU Virtual Classroom Requirements:

Visit the [Virtual Classroom Requirements Webpage](#).

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a

backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found on the [Brightspace Support Webpage](#).

Interaction with Instructor Statement

This is an online course; therefore, expect most communication to be online as well. Correspondence will always be through university email (your “myLeo” mail) and announcements in myLeo online (D2L). The instructor will make every effort to respond to emails within 24 provided the correspondence follows the requirements listed below. Students are encouraged to check university email daily.

All emails from students should include:

- **Course name and subject in the subject line (ex. ORGL 3322 – Posttest)**
- **Salutation**
- **Proper email etiquette (no “text” emails – use proper grammar and punctuation)**
- **Student name and CWID after the body of the email**

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail online in the [Student Guidebook](#).

Students should also consult the [Rules of Netiquette Webpage](#) for more information regarding how to interact with students in an online forum.

TAMUC Attendance

For more information about the attendance policy, please view the [Attendance Webpage](#) and the [Class Attendance Policy](#)

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty Policy](#)

Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Velma K. Waters Library Rm 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: [Office of Student Disability Resources and Services](#)

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information, or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

Counseling Services

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel.

COURSE OUTLINE / CALENDAR

Learning Objectives and Competencies	Materials to Read or Review	Assignments
<p>LO1: Chemistry of Hazardous Materials</p> <ul style="list-style-type: none"> ● Define OSHA requirements ● Name 16 categories about chemicals that OSHA requires ● Identify the physical and health hazard associated with each GHS pictogram ● Provide meanings of the numbers entered in the top three quadrants of hazard diamonds 	<p>Pre-test Readings Use of University Library, OSHA, CSB and Other research resources Post-test</p>	<p>Read the material for the week. Post-test</p>
<p>LO2: Responding to Incidents Involving the release of Flammable Liquids</p> <ul style="list-style-type: none"> ● Determine OSHA and NFPA flammable liquids ● Identify markers on glass cylinders ● Describe safety practices surrounding compressed gases ● Identify the practices of safe storage of flammable liquids 	<p>Pre-test Readings Use of University Library, OSHA, CSB and Other research resources Post-test</p>	<p>Post-test</p>
<p>LO3: Chemical forms of matter</p> <ul style="list-style-type: none"> ● Distinguish between elements and compounds ● Memorize the symbols of the elements listed ● Identify physical and chemical changes of substances ● Identify names and common properties of the major particles of 	<p>Pre-test Readings Use of University Library, OSHA, CSB and Other research resources Post-test</p>	<p>Post-test</p>

Learning Objectives and Competencies	Materials to Read or Review	Assignments
<p>all atoms</p> <ul style="list-style-type: none"> ● Distinguish between the nature of ionic and covalent bonding ● Write chemical formulas of ionic compounds 		
<p>LO4: Principles of Chemical Reactions</p> <ul style="list-style-type: none"> ● Describe the nature of a balanced chemical equation ● Identify the types of simple chemical equations ● Identify the factors that influence the rate of chemical reactions ● Describe the ordinary combustion of a substance in the air 	<p>Pre-test Readings Use of University Library, OSHA, CSB and Other research resources Post-test</p>	<p>Post-test</p>
<p>LO5: Use of DOT Hazardous Materials Regulations by Emergency Responders</p> <ul style="list-style-type: none"> ● Understand shipping and Hazardous Materials Table ● Identify information emergency responders obtain from hazardous material shipping descriptions ● Understand DOT labels ● Memorize hazard classes and divisions ● Understand UN/NA identification numbers and DOT's Emergency Response Guidebooks 	<p>Pre-test Readings Use of University Library, OSHA, CSB and Other research resources Post-test</p>	<p>Post-test</p>
<p>Culminating Project</p>	<p>Assignment</p>	<p>Read the material and submit culminating project. Complete all 5 post-tests.</p>