



# A&M-COMMERCE

## SHCB 430 – Hazardous Materials

### COURSE SYLLABUS

|              |  |              |  |
|--------------|--|--------------|--|
| <b>Term:</b> |  | <b>Year:</b> |  |
|--------------|--|--------------|--|

#### INSTRUCTOR INFORMATION

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|--|--|
| <b>Instructor Name:</b>                |  |
| <b>Office Phone:</b>                   |  |
| <b>A&amp;M Commerce Email Address:</b> |  |
| <b><u>Instructor Notes:</u></b>        |  |

**Office Location:** Online/Remote

**Office Hours:** Email, Telephone, or Virtual by Appointment

**Preferred Form of Communication:** Email

**Communication Response Time:** 24 Hours or Less (Grading of assignments is typically not completed in 24 hours or less)

#### **SAFETY AND HEALTH PROGRAM**

The Safety and Health Competency-Based (SHCB) at A&M-Commerce is an applied program of study in which students explore the impact of environmental and occupational hazards on human health and society, as well as develop effective interventions to control and prevent exposure to hazards. Students will develop the knowledge necessary to function at the safety and health professional level in industry.

#### **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. Emphasis is placed on the role of pre-emergency planning, combating, coordinating resources, and controlling a hazardous materials incident.

## **STUDENT LEARNING OUTCOMES**

Upon completion of this course, students will be able 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.

## **COURSE REQUIREMENTS**

### **INSTRUCTIONAL METHODS**

This course is an online course. To be successful, all course content should be reviewed. All required assignments must be completed. Contact the instructor by email for questions and/or assistance.

### **MATERIALS**

This course has been designed using Open Educational Resources (OER). All materials are embedded within the course or accessible via the Internet and/or available through [Waters Library](#). Students are encouraged to bookmark and/or save materials provided via the Internet for use with assignments in this class and other courses. Supplemental links and files will also be provided.

### **STUDENT TECHNICAL SKILLS**

At a minimum, students will need reliable computer and internet access for this course. Students must also be able to effectively use myLeo email, myLeo Online D2L, and Microsoft Office.

### **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 delivered in a seven-week term. Educational activities in this course promote regular and substantive interaction between students and faculty to ensure students demonstrate satisfactory competency.

## **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/or by course announcement (D2L). Responses to course emails meeting the below email requirements will be received within 24-hours. Students should also check their university email and course announcements daily.

### **Student Email Requirements**

All student emails should include:

- Course name and subject in the subject line (e.g., SHCB 000 – Posttest)
- Professional salutation (e.g., Mr., Ms., Dr., etc.)
- Proper email etiquette (no “text” emails – use proper grammar and punctuation)
- Student name

## **CBE COURSE ACCELERATION**

Students enrolled in CBE courses in the College of Innovation and Design are permitted to accelerate from one CBE course to another during a seven-week academic term under certain conditions. The request to accelerate from one course to another must be initiated by the student upon successful completion of currently enrolled CBE courses. Students are responsible for maintaining communication with faculty and their assigned advisor(s) throughout the acceleration process. Students who fail a course or who drop/withdraw from a CBE course are not eligible for acceleration. A student may only request permission to accelerate in one course at a time. The request to accelerate must be initiated and completed by 5:00 PM (Central) on the fifth Friday of the term

### **Process**

1. Student completes all required coursework in their CBE courses(s) with a grade of “A” or “B.”
2. Student receives emailed verification from the assigned instructor that the course has been satisfactorily completed (Grade of A or B only).
3. Student contacts assigned advisor to provide proof of completion and discuss eligibility for acceleration into another course.

## **COURSE ASSESSMENTS**

### **REQUIRED ASSIGNMENTS**

#### **Pretest(s)**

The purpose of a pretest is to provide a baseline assessment of your knowledge relative to the intended competencies of a particular learning objective module and/or this course. The pretest is required before you begin studying content in a particular module or the course. If you do not make at least 80% on the pretest, you should review all corresponding content and complete all associated activities to help you better prepare for your posttest(s) and/or culminating project. You will be provided only one (1) attempt at any pretest.

Note: Although required, the pretest does not count towards your final course grade.

#### **Posttest(s)**

The purpose of a posttest is to assess student knowledge and understanding of major concepts, theories, processes, etc., presented in the course. The posttest measures the competency of learning outcomes through essay, short answer, true/false, and/or multiple-choice questions. Posttests may be

included for each learning objective module and/or comprehensively at the end of the course. Please see the Course Grading and Course Calendar sections for specific details regarding respective point values and due dates. Students will be provided no more than three (3) attempts at any posttest.

### **Culminating Project**

The purpose of a culminating project is to measure competency of learning outcomes and assess knowledge of terms and the application of concepts presented in the course. The culminating project is required and may consist of one or more parts. Instructions for completing the project(s) are provided online in the course. A score of 80% or higher is minimally required to demonstrate competency on this assignment. Please see the Course Grading and Course Calendar sections for specific details regarding respective point values and due dates. Students will be provided no more than three (3) attempts at any project.

### **SATISFACTORY/UNSATISFACTORY COMPLETION**

Students must achieve 80% or higher on required assignments to demonstrate competency and pass the course. Students scoring less than 80% on these assignments will be provided an opportunity to review the material and make up to two additional attempts. Students who do not achieve at least 80% within three attempts will receive a grade of “F” and be required to retake the course.

### **RECOMMENDED LEARNING ACTIVITIES**

#### **Learning Objective (Module) Quizzes**

The purpose of any learning objective quiz is to emphasize key concepts, theories, processes, etc., introduced in the Learning Objective Module. These quizzes are not required or factored into your final course grade, but they are helpful toward achieving a passing score on any posttest attempt.

#### **Learning Objective Essays**

A brief short-answer item that the student submits to the instructor that asks students to synthesize and apply the concept, theory, process, etc., introduced in the Learning Objective Module. Essays are submitted to the instructor and do not require comments or “discussion” with other students in the course.

### **COURSE GRADING**

Only the following items will be used to calculate the final grade in this course.

| <b>REQUIRED ASSIGNMENTS</b>        | <b>POINTS</b> |
|------------------------------------|---------------|
| (5) Module Pretests                | 0             |
| (5) Module Posttests (100pts each) | 500           |
| Culminating Project                | 100           |
| <b>TOTAL</b>                       | <b>600</b>    |

|                      |                     |                    |                         |
|----------------------|---------------------|--------------------|-------------------------|
| <b>Grading Scale</b> | <b>A = 90%-100%</b> | <b>B = 80%-89%</b> | <b>F = 79% or Below</b> |
|----------------------|---------------------|--------------------|-------------------------|

### **COURSE OUTLINE/CALENDAR**

| <b>Learning Activity   Objective</b> | <b>Activities   Assignments</b> | <b>DUE</b> |
|--------------------------------------|---------------------------------|------------|
|--------------------------------------|---------------------------------|------------|

|  |  |  |
|--|--|--|
| LO1: Chemistry of Hazardous Materials                                    | Module Pretest<br>Module Readings<br>Module Posttest   | End of Course  |
| LO2: Responding to Incidents Involving the release of Flammable Liquids  | Module Pretest<br>Module Readings<br>Module Posttest   | End of Course  |
| LO3: Chemical forms of matter  | Module Pretest<br>Module Readings<br>Module Posttest   | End of Course  |
| LO4: Principles of Chemical Reactions                                    | Module Pretest<br>Module Readings<br>Module Posttest   | End of Course  |
| LO5: Use of DOT Hazardous Materials Regulations by Emergency Responders. | Module Pretest<br>Module Readings<br>Module Posttest   | End of Course  |
| Preliminary Review Deadline  | Recommended deadline for project(s) and posttest(s) to ensure time exists to revise/reattempt based upon scoring and/or instructor feedback. | Last Day of Week 6<br>11:59 PM (Central)<br>■ Sunday |
| End of Course Assessment(s)  | Successful Completion: <ul style="list-style-type: none"> <li>• Culminating Project</li> </ul>   | Last Day of Week 7<br>11:59 PM (Central)<br>■ Friday |

## **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, 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 scholastic work. Please see the following for definitions and details:

## [Undergraduate Academic Dishonesty Policy](#)

## [Undergraduate Student Academic Dishonesty Form](#)

### **CID Policy on Academic Integrity**

Academic dishonesty includes cheating, complicity in cheating, multiple submissions (or substantial portions) of the same work for credit without authorization, submitting another's work, plagiarism, submitting algorithmically (AI) plagiarized work, and other acts that may reasonably be called academic dishonesty.

- Students who commit academic dishonesty will receive a grade of 0 for the assignment in the course and be issued a Written Warning that is reported to the CID Assistant Dean's office and listed in a database.
- If the student does NOT have a previous Written Warning for academic dishonesty reported in CID courses and has additional attempts available for the assignment, the student may resubmit the assignment (this applies to CBE courses only).
- If the student has a Written Warning of academic dishonesty reported in CID courses, the student may NOT resubmit the assignment, and the instructor will follow the procedure detailed in [Policy 13.99.99.R0.03](#) for Undergraduate Academic Dishonesty and report the incident to the Provost Office.

### **Use of Artificial Intelligence**

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

### **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

Email: [studentdisabilityservices@tamuc.edu](mailto:studentdisabilityservices@tamuc.edu)

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

## **COUNSELING CENTER**

The Counseling Center, 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](http://www.tamuc.edu/counsel)

## **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 based upon race, color, religion, sex, national origin, disability, age, genetic information, or veteran status. Further, an environment free from discrimination based upon 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.

## **TECHNOLOGY REQUIREMENTS**

### **LEARNING MANAGEMENT SYSTEM**

All course sections offered by Texas A&M University-Commerce have an online myLeo course shell. Please refer to the following for questions or technical requirements:

[Learning Management System Requirements Webpage.](#)

[LMS Browser Support Webpage.](#)

[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](mailto: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, a TAMUC campus open computer lab, etc.*

## **COMMUNICATION AND SUPPORT**

Please contact your instructor directly with questions difficulties with course material.

## **TECHNICAL SUPPORT**

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. See the following for other options: [Brightspace Support](#).