



EAST TEXAS A&M UNIVERSITY

CBE 357 – Data Visualization for Business Insights

COURSE SYLLABUS

Term:	Fall I	Year:	2026
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INSTRUCTOR INFORMATION

Instructor Name:	Erica D. Ware, MBA, (she/her)
Office Phone:	901.567.8073
A&M Commerce Email Address:	erica.ware@etamu.edu
Instructor Notes:	Erica D. Ware is an Adjunct Professor of Data Visualizations in the College of Innovation and Design. She brings applied experience in business intelligence, data analytics, SQL, Power BI, Tableau, dashboard development, and practical data storytelling. This course is fully online and competency-based. Students should use university email for communication, review instructor feedback before resubmitting work, and reach out early when support is needed.

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)

[CBE Handbook Link](#)

COURSE INFORMATION

Course Materials

This course has been designed using Open Educational Resources (OER) and/or materials that are available through the [Waters Library](#). All materials are embedded within the course or are accessible via the internet or accessible through the Waters Library resource portal. After

taking the pretest, students are encouraged to bookmark, download, or save materials provided via the internet for use with assignments and projects in this class.

Competency-Based Programs

This elective can be used for the CBE programs provided in the College of Innovation and Design. The CBE programs provide opportunities for students to receive credit for what they know and can do already and 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

This course will provide intermediate skills in data visualization using industry-standard business intelligence software. Students will develop visualizations from existing data and learn to use various charts, graphs, maps, dashboards, and stories. In this course, students will receive an introduction to the area of data visualization which will be supplemented by hands on work by using a data visualization tool. Students will build on analytical skills to locate and prep data from external sources to be used in data visualization and to derive insight from the data. Students will then learn how to effectively communicate insights from data to a broader audience and make informed business decisions. Students will have the opportunity to build on their technical skills throughout the semester by completing assignments and the cumulative project.

Student Learning Outcomes

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

- Explain Data Visualization, Charts, and Graphs relate to data analysis
- Independently locate external data for data visualization project work and prepare it for consumption by the data visualization engine.
- Apply the best data visualization techniques for creating interactive data visualizations (dashboards, stories, charts) that provide a holistic and accurate representation of the data's trend and insight.
- Communicate (oral or written) the findings of the data to a broader audience and recommend the best course of action for the business insights based on the data story.

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 can demonstrate competency.

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.

Dropping the Course Due to Failure

Students are NOT allowed to drop a course due to failure in the course. In the event a student does not make 80% or higher on a posttest or culminating project by the third attempt, the student is not allowed to drop the course due to failure. The student is also ineligible to accelerate or re-enroll/re-take the course in the current term.

To drop a course, students must have passing grades in the course or have not attempted any assignments in the course. Please reach out to an academic advisor to drop a course.

STUDENT RESPONSIBILITIES FOR COURSE

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 by the due date specified. Please contact the instructor by email for any assistance or support.

CWID and Password

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@etamu.edu

Technology-Related Issues

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.

TECHNOLOGY REQUIREMENTS AND SUPPORT

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.

Learning Management System (LMS) – D2L

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:

- View the [Learning Management System Requirements Webpage](#).
- Learn more on the [LMS Browser Support Webpage](#).

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](#).

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement

This is an online course; therefore, expect most communication to be online as well. If you have any questions or are having difficulties with the course material, please contact your instructor. Correspondence will always be through university email (your “myLeo” mail) and announcements in myLeo online (D2L). **You will not RECEIVE email through D2L, so be sure to check you TAMUC email for communication.** The instructor will make every effort to respond to emails within 24 hours provided the correspondence follows the requirements listed below. Students are encouraged to check university email daily.

Include the Following in Emails with Instructor:

- Course name and subject in the subject line (ex. EDCB 517 – Posttest)
- Salutation (Good afternoon, Dr. Jackson)
- Proper email etiquette (no “text” emails – use proper grammar and punctuation)
- Student name and CWID after the body of the email (possibly add to student signature on email)

CID Studio

The CID Studio is located in D2L and available to all CID students. The CID Studio contains modules intended to support and inform students on their educational journey.

[CID Studio Link](#) – Please contact your advisor if you need access.

RESPONSE TIME & GRADING TIME IN CBE COURSES

Instructors for competency-based education courses are expected to respond to students in 24 hours. If you are not able to reach your instructor, please reach out to your advisor for help. The grading of assignments in courses will be done in a timely manner, but grading responses will not be returned in 24 hours.

ACCELERATION IN CBE COURSES

Students enrolled in competency-based education 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. Student may only request permission to accelerate in one course at a time. **Request to accelerate is initiated and completed by 5:00 pm CST on the fifth Friday of a seven-week academic term.**

Acceleration Process:

1. Student successfully 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 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.

ETAMU Attendance

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

Academic Integrity

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

[East Texas A&M Academic Integrity Guide](#)

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

[Academic Integrity Reporting Form](#)

[Overview of Academic Misconduct Reporting Process](#)

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.

Submitting Past Work

The resubmission of work submitted in a past course is self-plagiarism. Also, the resubmission of substantial parts of work submitted in a past course is self-plagiarism. **If a student would like to resubmit past work or substantial parts of past work, the student must gain permission from the instructor prior to submission and cite the work properly.** If the student does not gain permission and cite the work, then the submission will be flagged for self-plagiarism and result in actions detailed in the CID Policy on Academic Integrity.

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
 Fax (903) 468-8148

Email: studentdisabilityservices@etamu.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 with 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.

East Texas A&M Supports Students' Mental Health – Counseling Services

The Counseling Center at East Texas A&M University, 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 **their website:** <https://www.etamu.edu/counseling-center/>

Mental Health and Well-Being

The university aims to provide students with essential knowledge and tools to understand and support mental health. As part of our commitment to your well-being, we offer access to Telus Health, a service available 24/7/365 via chat, phone, or webinar. For more information on accessing the app and to explore the resources available to you for guidance and support, please visit their website: <https://www.etamu.edu/telus/>

COURSE ASSESSMENTS

Requirement for Successfully Passing Course

Students must achieve 80% or higher for **every** posttest **and** culminating project to demonstrate mastery of all competencies and pass the course.

Using Remaining Attempts to Improve Grade

Students are permitted to use remaining attempts on a posttest and/or culminating project after scoring 80% or higher to attempt to make a higher score on the assignment. Students are not permitted to exceed 3 attempts for any posttest or culminating project.

- **Must** complete **all** required posttests and culminating project and receive a grade on the assignments before doing additional attempts.
- The **highest** grade achieved on the posttest or culminating project will be used for the **final grade** for the posttest and culminating project.
- Please keep in mind that submitting during the final days and hours of the term means that you may not have time to resubmit or receive feedback.
- Once you have accelerated out of the course and received a completion email, you may not return to the course to resubmit work.

Pretest

The purpose of the pretest is to provide students with a baseline understanding of your knowledge in the competency. 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. The pretest is required before you begin studying course materials. A passing score on the pretest does NOT provide permission to skip required assignments in the course. The grade on the pretest does **not** count in the final grade for this course.

Posttest

At the end of a module or course is a comprehensive exam that assesses student knowledge and understanding of major concepts, theories, processes, etc., in the module or the course. A **score of 80% or higher is required** to demonstrate mastery of the competency. If a student scores less than 80% on a posttest, the student will have an opportunity to review the material and retake the posttest two additional times. Students who fail the posttest should review feedback from the instructor before reattempting the posttest on another attempt. If the posttest 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. All posttests in the course have a due date: **Last day of week 7, Friday by 11:59 PM CST.**

Culminating Project

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

for revisions, submit by the end of week 6. Culminating projects have a due date: **Last day of week 7, Friday by 11:59 PM CST.**

GRADING

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

Assignment	Points	Weight
Module Pretests	90 points total (30 points each)	0%
Module 1 Posttest	100 points	20 %
Module 2 Posttest	100 points	20 %
Module 3 Posttest	100 points	20 %
Culminating Project	100 points	40 %
Total	490 points total	100%

Grading Scale

A = 90%-100%

B = 80%-89%

F = 79% or Below

COURSE OUTLINE / CALENDAR

Suggested Schedule

Module	Competency	Required Activities
1	Explain Data Visualization, Charts, and Graphs relate to data analysis	● Complete Pretest (once completed, the module contents will open) ● Review Module Contents ● Complete Posttest – Must make 80% or higher to successfully pass the course. Three attempts allowed.
2	Independently locate external data for data visualization project work and prepare it for consumption by the data visualization engine.	● Complete Pretest (once completed, the module contents will open) ● Review Module Contents ● Complete Posttest – Must make 80% or higher to successfully pass the course. Three attempts allowed.

3	Apply the best data visualization techniques for creating interactive data visualizations (dashboards, stories, charts) that provide a holistic and accurate representation of the data's trend and insight.	● Complete Pretest (once completed, the module contents will open) ● Review Module Contents ● Complete Posttest – Must make 80% or higher to successfully pass the course. Three attempts allowed.
Culminating Project	Communicate (oral or written) the findings of the data to a broader audience and recommend the best course of action for the business insights based on the data story.	● Required – Must score 80% or higher to successfully pass the course. ● Three attempts allowed

- **All assignments must be submitted by 11:59PM/CST on the Friday of Week 7 of the term.**
- A score of 80% or higher on the Culminating Project and all Posttests is required to demonstrate competency and receive credit for the course.
- **Tip:** After a failed attempt at a posttest or the culminating project, review feedback provided by your instructor and/or reach out to your instructor with questions before moving to the next attempt.