



CIS 3302-110, 80266 , BUSINESS ANALYTICS

Fall 2022

Texas A&M University-Central Texas

COURSE DATES, MODALITY, AND LOCATION

This 100% online course uses the A&M-Central Texas Canvas Learning Management System [<https://tamuct.instructure.com/>]. The course syllabus, schedule, supplemental readings, class announcements, presentations, learning modules, assignments, and other course materials will be posted to Canvas. Course Dates: August 22, 2022 – December 09, 2022

INSTRUCTOR AND CONTACT INFORMATION

Instructor : Dr. Piyush Vyas

Office : TBD

Phone: TBD

Email: Piyush.vyas@tamuct.edu or Canvas Inbox

Office Hours

I am available to all students on an appointment basis. Please send an email to Piyush.vyas@tamuct.edu to schedule an appointment. Meeting options are either via team, zoom or telephone. All appointments will be confirmed with an email from me to your Warrior email account. When sending an email to me, please utilize only your Warrior account. Emails sent from other providers will not be answered.

Student-instructor interaction

I will respond to all student emails within 24 - 48 hours of receipt.

Emergency Warning System for Texas A&M University-Central Texas SAFEZONE. SafeZone provides a public safety application that gives you the ability to call for help with the push of a button. It also provides Texas A&M University-Central Texas the ability to communicate emergency information quickly via push notifications, email, and text messages. All students automatically receive email and text messages via their myCT accounts.

Downloading SafeZone allows access to push notifications and enables you to connect directly for help through the app.

You can download SafeZone from the app store and use your myCT credentials to log in. If you would like more information, you can visit the [SafeZone](http://www.safezoneapp.com) website [www.safezoneapp.com].

To register SafeZone on your phone, please follow these 3 easy steps:

1. Download the SafeZone App from your phone store using the link below:
 - o [iPhone/iPad](https://apps.apple.com/app/safezone/id533054756): [https://apps.apple.com/app/safezone/id533054756]
 - o [Android Phone / Tablet](https://play.google.com/store/apps/details?id=com.criticalarc.safezoneapp) [https://play.google.com/store/apps/details?id=com.criticalarc.safezoneapp]
2. Launch the app and enter your myCT email address (e.g. {name}@tamuct.edu)
3. Complete your profile and accept the terms of service

For updates on COVID information, please monitor the University [website](https://www.tamuct.edu/covid19/) [https://www.tamuct.edu/covid19/]

COURSE INFORMATION

Course Overview and description

Examine the theory and application of business analytics applied in accounting, finance, marketing, management, and other business disciplines. Develop basic analytical skills to gain insights and make better decisions. Special emphasis on data management and wrangling, data visualization and summary measures, probability and probability distributions, statistical inference, and regression analysis.

Course Objective or Goal

Student Learning Outcomes

At the conclusion of the course, the student will be able to:

CL01: Explain and describe the importance of business analytics, the various types of data, variables and types of measurement scales, different data sources and file formats.

CL02: Describe the key concepts related to data management, inspect and explore data, apply data preparation techniques to handle missing values and subset data, transform numerical and categorical variables.

CL03: Visualize categorical and numerical variables; construct and interpret a contingency table, a stacked bar chart, a scatterplot, a bubble plot, a line chart, and a heat map; calculate and interpret summary measures, use boxplots and z-scores to identify outliers.

CL04: Describe and apply probability concepts and rules, apply Bayes' theorem, describe a discrete random variable, calculate probabilities for binomial and Poisson distributions, describe the normal distribution and calculate its associated probabilities.

CL05: Describe the sampling distribution of the sample mean and sample proportion, construct a confidence interval for the population mean and population proportion, conduct a hypothesis test for the population mean and population proportion.

CL06: Estimate and interpret a linear regression model, interpret goodness-of-fit measures, conduct tests of significance, address common violations of the OLS assumptions.

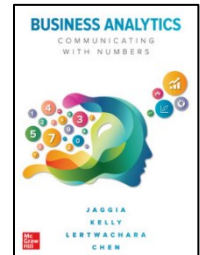
Required Reading and Textbook(s)

Title: Business Analytics: Communicating with Numbers

Authors: Sanjiv Jaggia, Alison Kelly, Kevin Lertwachara, and Leida Chen

Edition: 1st

Publisher: McGraw Hill Education



COURSE REQUIREMENTS

Meet & Greet Discussion Forum: There will be one (1) Meet & Greet Discussion Forum to be completed in the A&M-Central Texas Canvas Learning Management System. Students must make an initial post introducing themselves to the class (noting it would be nice if you also responded to your classmates). For the Meet & Greet Discussion Forum, please only share what you are comfortable with. The Meet & Greet discussion forum is worth a maximum of fifteen (**10**) points.

Quizzes: There will be six (**6**) quizzes to be completed in Connect as accessed through the A&M-Central Texas Canvas Learning Management System. Each quiz (solely based on textbook material) includes **10** multiple-choice and/or True/False to be answered in a 55-minute timeframe. Each quiz includes two (**2**) attempts with the highest score recorded in the grade book. If you decide to pursue a second attempt, you will have to start the quiz over. Each quiz is worth a maximum of ten (**10**) points each for a maximum total of **60** points.

Homework: There will be five (**5**) homework assignments to be completed in Connect as accessed through the A&M-Central Texas Canvas Learning Management System. The homework assignments include a selection of the most relevant and engaging assets from each chapter (except Chapter 1) and are further configured to cover all the chapter objectives. You may be asked to access a data file/table/chart to answer a homework assignment question and have to click a link to download said information. Each homework assignment includes five (5) to seven (7) questions, and some questions will have multiple parts. Each homework is worth a maximum of **10** points each for a maximum total of 50 points.

Exams: There will be two (**2**) exams to be completed in Connect as accessed through the A&M-Central Texas Canvas Learning Management System. The exams include 10 to 20 questions each and are modeled similarly to the homework assignments and Quiz. Each exam includes one (1) attempt. Each exam is worth a maximum of **40** points, each for a maximum total of 80 points.

Grading Criteria

Rubric and Conversion

Required Activity	Quantity	Points	Total
Meet & Greet Discussion Forum	1	10	10

Quizzes	6	10	60
Homework	5	10	50
Exams	2	40	80
Total			200

Point Range	Letter Grade
200 - 180	A
179 - 160	B
159 - 140	C
139 - 120	D
119 - 0	F

Posting of Grades

Grades will be posted to the Canvas grade book as assignments are graded. This will typically be done once all students have submitted the assignment.

Grading Policies

All assignments must be submitted before the posted deadline. No late assignments will be accepted.

COURSE OUTLINE AND CALENDAR

Complete Course Calendar

Week	Dates	Learning Materials	Deliverables
1	08/22/22 - 08/28/22	Syllabus Reading and Orientation Video	Meet & Greet Discussion Forum
2	08/29/22 - 09/04/22	PPTs & Chapter 1 Textbook and Class video	Quiz #1
3	09/05/22 - 09/11/22	Chapter 2 Textbook, PPTs and Class video	Quiz #2
4	09/12/22 - 09/18/22	Chapter 2 Exercise video	Homework #1
5	09/19/22 - 09/25/22	Chapter 3 Textbook Chapter 3 PPTs & Class Video	Quiz #3
6	09/26/22 - 10/02/22	Chapter 3 Exercise Video	Homework #2
7	10/03/22 - 10/09/22		

8	10/10/22 - 10/16/22	Chapter 4 Textbook Chapter 4 PPTs & Video	Quiz #4
9	10/17/22 - 10/23/22	Chapter 4 Exercise Video	Homework #3
10	10/24/22 - 10/30/22		Exam 1
11	10/31/22 - 11/06/22	Chapter 5 Textbook Chapter 5 PPTs & Video	Quiz #5
12	11/07/22 - 11/13/22	Chapter 5 Exercise Video	Homework #4
13	11/14/22 - 11/20/22		Quiz #6
14	11/21/22 - 11/27/22	Chapter 6 Textbook Chapter 6 PPTs & Video	Homework #5
15	11/28/22 - 12/04/22	Chapter 6 Exercise Video	
16	12/05/22 - 12/09/22		Exam #2

Important University Dates

Please see the attached link for the A&M-Central Texas Academic Calendars, which track important deadlines and dates for the school year and semesters:
<https://www.tamuct.edu/registrar/academic-calendar.html>

TECHNOLOGY REQUIREMENTS AND SUPPORT

This course will use Microsoft Office 365 software. As a University student, you can download the software at no cost. Please access this University link for download instructions:
<https://tamuct.onecampus.com/task/all/office365-software>

This course uses Frontline Solvers, an Excel add-in software. You will be provided detailed instructions, in advance of the course start date, on how you can obtain and download the software separate and apart from this syllabus.

Technology Requirements

This course will use the A&M-Central Texas Instructure Canvas learning management system. **We strongly recommend the latest versions of Chrome or Firefox browsers. Canvas no longer supports any version of Internet Explorer.**

Logon to A&M-Central Texas Canvas [<https://tamuct.instructure.com/>] or access Canvas through the TAMUCT Online link in myCT [<https://tamuct.onecampus.com/>]. You will log in through our Microsoft portal.

Username: Your MyCT email address. Password: Your MyCT password

Canvas Support

Use the Canvas Help link, located at the bottom of the left-hand menu, for issues with Canvas. You can select “Chat with Canvas Support,” submit a support request through “Report a Problem,” or call the Canvas support line: 1-844-757-0953.

For issues related to course content and requirements, contact your instructor.

Online Proctored Testing

A&M-Central Texas uses Proctorio for online identity verification and proctored testing. This service is provided at no direct cost to students. If the course requires identity verification or proctored testing, the technology requirements are: Any computer meeting the minimum computing requirements, plus web camera, speaker, and microphone (or headset). Proctorio also requires the Chrome web browser with their custom plug in.

Other Technology Support

For log-in problems, students should contact Help Desk Central, 24 hours a day, 7 days a week

Email: helpdesk@tamu.edu

Phone: (254) 519-5466

[Web Chat](http://hdc.tamu.edu): [<http://hdc.tamu.edu>]

Please let the support technician know you are an A&M-Central Texas student.

UNIVERSITY RESOURCES, PROCEDURES, AND GUIDELINES

Academic Accommodations

At Texas A&M University-Central Texas, we value an inclusive learning environment where every student has an equal chance to succeed and has the right to a barrier-free education. The Warrior Center for Student Success, Equity and Inclusion is responsible for ensuring that students with a disability receive equal access to the university’s programs, services and activities. If you believe you have a disability requiring reasonable accommodations, please contact the Office of Access and Inclusion, WH-212; or call (254) 501-5836. Any information you provide is private and confidential and will be treated as such.

For more information, please visit our [Access & Inclusion](https://tamuct.instructure.com/courses/717) Canvas page (log-in required) [<https://tamuct.instructure.com/courses/717>]

Academic Integrity

Texas A&M University-Central Texas values the integrity of the academic enterprise and strives for the highest standards of academic conduct. A&M-Central Texas expects its students, faculty, and staff to support the adherence to high standards of personal and scholarly conduct to preserve the honor and integrity of the creative community. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing grade for the course. All academic misconduct concerns will be referred to the Office of Student Conduct.

When in doubt on collaboration, citation, or any issue, please contact your instructor before taking a course of action.

For more [information regarding the student conduct process](https://www.tamuct.edu/student-affairs/student-conduct.html), [https://www.tamuct.edu/student-affairs/student-conduct.html].

If you know of potential honor violations by other students, you may [submit a referral](https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=0), [https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=0].

Drop Policy

If you discover that you need to drop this class, you must complete the [Drop Request](#) Dynamic Form through Warrior Web.

[https://federation.ngwebsolutions.com/sp/startSSO.ping?PartnerIdpId=https://eis-prod.ec.tamuct.edu:443/samlssso&SpSessionAuthnAdapterId=tamuctDF&TargetResource=https%3a%2f%2fdynamicforms.ngwebsolutions.com%2fSubmit%2fStart%2f53b8369e-0502-4f36-be43-f02a4202f612].

Faculty cannot drop students; this is always the responsibility of the student. The Registrar's Office will provide a deadline on the Academic Calendar for which the form must be completed. Once you submit the completed form to the Registrar's Office, you must go into Warrior Web and confirm that you are no longer enrolled. If you still show as enrolled, FOLLOW-UP with the Registrar's Office immediately. You are to attend class until the procedure is complete to avoid penalty for absence. Should you miss the drop deadline or fail to follow the procedure, you will receive an F in the course, which may affect your financial aid and/or VA educational benefits.

Important information for Pregnant and/or Parenting Students

Texas A&M University-Central Texas supports students who are pregnant, experiencing pregnancy-related conditions, and/or parenting. In accordance with requirements of Title IX and related guidance from US Department of Education's Office of Civil Rights, the Dean of Student Affairs' Office can assist students who are pregnant and/or parenting in seeking accommodations related to pregnancy and/or parenting. Students should seek out assistance as early in the pregnancy as possible. For more information, please visit [Student Affairs](https://www.tamuct.edu/student-affairs/pregnant-and-parenting-students.html) [https://www.tamuct.edu/student-affairs/pregnant-and-parenting-students.html]. Students may also contact the institution's Title IX Coordinator. If you would like to read more about these [requirements and guidelines](#) online, please visit the website [http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf].

Title IX of the Education Amendments Act of 1972 prohibits discrimination on the basis of sex and gender—including pregnancy, parenting, and all related conditions. A&M-Central Texas is able to provide flexible and individualized reasonable accommodation to pregnant and parenting students. All pregnant and parenting students should contact the Associate Dean in the Division of Student Affairs at (254) 501-5909 to seek out assistance. Students may also contact the University's Title IX Coordinator.

Tutoring

Tutoring is available to all A&M-Central Texas students, both virtually and in-person. Student success coaching is available online upon request.

If you have a question, are interested in becoming a tutor, or in need of success coaching contact the Warrior Center for Student Success, Equity and Inclusion at (254) 501-5836, visit the Warrior Center at 212 Warrior Hall, or by emailing WarriorCenter@tamuct.edu.

To schedule tutoring sessions and view tutor availability, please visit [Tutor Matching Services](https://tutormatchingservice.com/TAMUCT) [https://tutormatchingservice.com/TAMUCT] or visit the Tutoring Center in 111 Warrior Hall.

Chat live with a remote tutor 24/7 for almost any subject from on your computer! Tutor.com is an online tutoring platform that enables A&M-Central Texas students to log in and receive online tutoring support at no additional cost. This tool provides tutoring in over 40 subject areas except writing support. Access Tutor.com through Canvas.

University Library & Archives

The University Library & Archives provides many services in support of research across campus and at a distance. We offer over 200 electronic databases containing approximately 400,000 eBooks and 82,000 journals, in addition to the 96,000 items in our print collection, which can be mailed to students who live more than 50 miles from campus. Research guides for each subject taught at A&M-Central Texas are available through our website to help students navigate these resources. On campus, the library offers technology including cameras, laptops, microphones, webcams, and digital sound recorders.

Research assistance from a librarian is also available 24 hours a day through our online chat service, and at the reference desk when the library is open. Research sessions can be scheduled for more comprehensive assistance, and may take place virtually through WebEx, Microsoft Teams or in-person at the library. [Schedule an appointment here](https://tamuct.libcal.com/appointments/?g=6956) [https://tamuct.libcal.com/appointments/?g=6956]. Assistance may cover many topics, including how to find articles in peer-reviewed journals, how to cite resources, and how to piece together research for written assignments.

Our 27,000-square-foot facility on the A&M-Central Texas main campus includes student lounges, private study rooms, group work spaces, computer labs, family areas suitable for all ages, and many other features. Services such as interlibrary loan, TexShare, binding, and laminating are available. The library frequently offers workshops, tours, readings, and other events. For more information, please visit our [Library website](http://tamuct.libguides.com/index) [http://tamuct.libguides.com/index]

University Writing Center

University Writing Center: Located in Warrior Hall 416, the University Writing Center (UWC) at Texas A&M University–Central Texas (A&M–Central Texas) is a free service open to all A&M–Central Texas students. The hours of operation are from 10:00 a.m.-5:00 p.m. Monday thru Thursday in Warrior Hall 416 (with online tutoring available every hour as well) with satellite

hours available online only Monday thru Thursday from 6:00-9:00 p.m. and Saturday 12:00-3:00 p.m.

Tutors are prepared to help writers of all levels and abilities at any stage of the writing process. While tutors will not write, edit, or grade papers, they will assist students in developing more effective composing practices. By providing a practice audience for students' ideas and writing, our tutors highlight the ways in which they read and interpret students' texts, offering guidance and support throughout the various stages of the writing process. In addition, students may work independently in the UWC by checking out a laptop that runs the Microsoft Office suite and connects to WIFI, or by consulting our resources on writing, including all of the relevant style guides. Whether you need help brainstorming ideas, organizing an essay, proofreading, understanding proper citation practices, or just want a quiet place to work, the UWC is here to help!

Students may arrange a one-to-one session with a trained and experienced writing tutor by making an appointment via [WOnline](https://tamuct.mywconline.com/) [https://tamuct.mywconline.com/]. In addition, you can email Dr. Bruce Bowles Jr. at bruce.bowles@tamuct.edu if you have any questions about the UWC, need any assistance with scheduling, or would like to schedule a recurring appointment with your favorite tutor.

OPTIONAL POLICY STATEMENTS

A Note about Sexual Violence at A&M-Central Texas

Sexual violence is a serious safety, social justice, and public health issue. The university offers support for anyone struggling with these issues. University faculty are mandated reporters, so if someone discloses that they were sexually assaulted (or a victim of Domestic/Dating Violence or Stalking) while a student at TAMUCT, faculty members are required to inform the Title IX Office. If you want to discuss any of these issues confidentially, you can do so through Student Wellness and Counseling (254-501-5955) located on the second floor of Warrior Hall (207L).

Sexual violence can occur on our campus because predators often feel emboldened, and victims often feel silenced or shamed. It is incumbent on ALL of us to find ways to actively create environments that tell predators we don't agree with their behaviors and tell survivors we will support them. Your actions matter. Don't be a bystander; be an agent of change. For additional information on campus policy and resources visit the [Title IX webpage](https://www.tamuct.edu/compliance/titleix.html) [https://www.tamuct.edu/compliance/titleix.html].

Behavioral Intervention

Texas A&M University-Central Texas cares about the safety, health, and well-being of its students, faculty, staff, and community. If you are aware of individuals for whom you have a concern, please make a referral to the Behavioral Intervention Team. Referring your concern shows you care. You can complete the [referral](#) online

[https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=2].

Anonymous referrals are accepted. Please see the [Behavioral Intervention Team](https://www.tamuct.edu/bit) website for more information [https://www.tamuct.edu/bit]. If a person's behavior poses an imminent threat to you or another, contact 911 or A&M-Central Texas University Police at 254-501-5805.

OTHER POLICIES

The instructor reserves the right to modify the course syllabus during the semester for the benefit of the students.

The instructor reserves the right to supplement materials presented in the text with additional course material that may help the students better understand a topic(s).

Copyright Notice

Students should assume that all course material is copyrighted by the respective author(s). Reproduction of course material is prohibited without consent by the author and/or course instructor. Violation of copyright is against the law and Texas A&M University-Central Texas' Code of Academic Honesty. All alleged violations will be reported to the Office of Student Conduct.

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