



TEXAS A&M UNIVERSITY
SAN ANTONIO

QMBS 3360:900, Business Statistics II

Fall 2024

CRN 10335 Dep. of Acct & Finance College of Business

Course Syllabus

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|--------------------------------------|---|
| Class Meeting Time and Place: | Wednesday, Classroom Hall 102 |
| Class Time: | 11:00 pm - 12:15pm |
| Instructor: | Yan Song, PhD |
| E-Mail: | yan.song@tamusa.edu |
| Office: | BHL 241KK |
| Course Website: | http://tamusa.blackboard.com/ |
| Office Hours: | Wed. 10:00 to 11:00 am and 3:30 to 6:00 p.m |

Catalog Course Description: This course is a continuation of Business Statistics I. This series explores descriptive and inferential statistical techniques for business and economic decision making. Building on the concepts and applications learned in QMBS/BUAD 2305, this course focuses on statistical concepts including, but not limited to, hypothesis testing, goodness-of-fit, tests of independence, analysis of variance (ANOVA), linear and multiple regression, and time series.

Course Objectives: The objective of the course is to provide the student with knowledge of the statistical methods to solve different types of business problems.

Prerequisites: QMBS/BUAD 2305 with a grade of 'C' or better

Student Learning Outcomes:

After successful completion of this course, students will be able to:

1. To statistically describe data in a frequency table and a variety of graphs
2. To statistically describe measures of location and dispersion
3. To be able to construct a probability distribution discretely and normally
4. To be able to apply and construct sampling methods and sampling distributions
5. To be able to develop and test hypothesis
6. To be able to apply correlations and regression.

AACSB Assessment:

The College of Business is in the process of applying for AACSB accreditation. As part of that process, students will be assessed on program level outcomes based on course outcomes from various courses. The materials from this course may be used for assessing such program level outcomes, and hence students must follow the necessary rigor to ensure mastery and retention of the above course outcomes.

COVID-19 Safety Protocol: Due to the current pandemic environment, all university personnel (faculty, students and staff, etc) are required to adhere to mandated procedures and guidelines as communicated through university communications. For details and updated information on COVID-19 safety protocol please visit <https://www.tamusa.edu/community-safety-together/index.html>.

Required Materials:

- **Textbook:** Modern Business Statistics with Microsoft Excel, 7th Ed., Anderson et al. Cengage
- **Mindtap:** Assignments and quizzes will be administered through Mindtap.
- **Blackboard:** <http://tamusa.blackboard.com>. Supplementary materials are posted in Blackboard, which is used for communication, assignments, quizzes and exams. Your user ID is the Jaguar ID (aka J Number e.g. J00001234). Your password is your date of birth (MMDDYY). You should monitor announcements in Blackboard several times a day.
- **Calculator**
- **Time Expectation for coursework:** You are expected to spend 4-8 hours per week for the course. Based on the background, some student may require more time. Time spent may be longer when assignment/exams are due.

Course Requirements:

1. Students should check the Course Calendar, Announcements in Blackboard, and Emails on a regular basis.
2. Students should keep current with all course assignments, quizzes, and examinations.
3. If the course uses remote proctoring for exams, students must schedule their exam early in the semester.
4. Students should ask questions and communicate with the instructor online.
5. For online courses, students should keep current on class recordings
6. For all classwork, exams, quizzes etc., students are responsible for availability of internet connectivity on time. Extensions will not be granted for lack of availability of internet connections.
7. Students are expected to attend lectures virtually during the class meeting time.
8. **For online asynchronous courses, there will be no online class sessions. All materials will be made available through Blackboard or through online links.**

Grading Policy: The final course grade will be based on your performance on the quizzes, exams and class attendance using the following weights:

| | |
|-------------|-----|
| Assignments | 15% |
| Quizzes | 15% |
| Midterm 1 | 20% |
| Midterm 2 | 20% |
| Final Exam | 30% |

The final letter grades will be assigned as follows: Above 90% \Rightarrow A; 80-89.99% \Rightarrow B; 70-79.99% \Rightarrow C; 60-69.99% \Rightarrow D; Below 60% \Rightarrow F. This course has a requirement of a grade of C as a minimal grade for satisfactory completion of this course.

The instructor reserves the right to adjust the student's final grade based on the overall performance.

Homework assignments and Quizzes: There will be homework assignments assigned from the chapter every other week to allow you to practice the concepts, and some quizzes throughout the semester. These will be open note but must be completed independently.

No Make-ups or late submissions will be accepted for any missed homework assignments and quizzes except certain special reason by showing authorized notes, like doctor notes.

Examinations: There will be two mandatory mid-term exam and a mandatory final exam. Exams will consist of multiple-choice questions, problem-solving questions. The exam materials will come from

lecture notes, the textbook, and class discussions. Questions will emphasize understanding and applications of concepts and topics covered in class.

No Make-ups or late submissions will be accepted for any of exams, except certain special reason by showing authorized notes, like doctor notes.

Proctored Exams: Examinations in this class may be administered using secure online testing services. Details regarding proctored test sign up and administration will be provided at least 2 weeks prior to the exam.

Academic Integrity sanctions: incidents of academic misconduct such as cheating will result in the assignment/ quiz/exam being graded as an F. All cases of suspected academic misconduct will be reported to the office of student rights and responsibilities.

Make up and Late exam policy As a general rule, no make-ups or late submissions will be offered or accepted for any missed exams. Late submissions or make-ups **may** be accepted in extraordinary circumstances such as an excused official university activity, a severe illness, or a dire emergency. However, you must provide comprehensive documentation within a few days of the missed exam.

Class conduct and Civility code: Everyone in class is expected to follow all rules in the student handbook¹, as well as common courtesy during classroom lectures and discussions in class and online, including the following:

1. Students are expected to be in class on time and to remain until the end of the class.
2. Attendance may be taken at the beginning or the end of the class.
3. It is the students' responsibility to obtain and be able to use the required materials and software for this class.
4. Students must retain copies of all assignments and graded work for verification purposes and provide it to the instructor, if necessary. Keep backup copies of all computer files and e-mails till your final grade is received.
5. For any questions about the exams and assignments, a student should contact the instructor, well in advance of the day they are due, so the instructor may have enough time to provide feedback.
6. All communications will be **via e-mail communications your TAMUSA student e-mail account**. It is the responsibility of the student to check their TAMUSA email regularly. The instructor will reply to a student e-mail message within 48 hours during week days (Monday-Friday).
7. All assignment submissions must be uploaded by the due date.

Class attendance and Participation: A vital part of every student's education is regular attendance of class meetings for face-to-face, hybrid and online synchronous classes. Any absences tend to lower the quality of a student's work, and frequent or persistent absences may result in a failing grade.

The course is intensive and challenging and you are expected to master the materials presented in class. The structure of the class makes your individual study and preparation outside of class extremely important, and may vary considerably based on student background. However, a **minimum** of four hours of work outside the class is expected for every one hour of class period per week.

University Email Policy and Course Communications: All correspondence between professors and students must occur via TAMUSA email accounts or through Blackboard messaging. You must have your Jaguar email account ready and working. If either email or Blackboard is not working, contact the help

¹ <https://www.tamusa.edu/uploadfile/folders/fcestrad/pdf/pdf-635767864704349879-10.100.150.124.pdf>
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desk at **210-784-4357**.

Academic Misconduct Policy: Texas A&M University-San Antonio students are expected to exhibit a high level of honesty and integrity in their pursuit of higher education, as specified in the TAMUSA Student Handbook. For more information, please visit the Office of Student Rights & Responsibilities web page: <https://www.tamusa.edu/student-rights-and-responsibilities/index.html> or in the Student Handbook accessed by the URL cited below.

Academic misconduct includes, but is not limited to, cheating, plagiarism, multiple submissions, collusion, lying and bribery. In cases of academic misconduct, students may be subject not only to grade sanctions in courses but to disciplinary action. If a student wishes to appeal the decision of suspension or expulsion due to violations of academic misconduct, they must initiate their appeal as outlined within the Student Code of Conduct.

All student term papers and other written assignments are subject to analysis by anti-plagiarism software. Posting of any class work given to student, or solutions, or discussion, on publicly accessible forums or on social media is not permissible unless explicit written permission have been granted by the instructor.

Key Dates For Fall 2024 Semester

The complete academic calendar is available online:

<https://www.tamusa.edu/academics/academic-calendar/index.html>

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|-------------------------|-------------------|--|
| August 22 | Thursday | Drop for non-payment |
| August 26 | Monday | First class day |
| September 2 | Monday | Labor Day Holiday |
| September 3 | Tuesday | Last day to register |
| September 11 | Wednesday | Census Date |
| September 12 | Thursday | Drop for non-payment |
| October 7-October 18 | Monday-Friday | Midterm grading period |
| November 27 | Wednesday | Study day - No classes |
| November 28-November 30 | Thursday-Saturday | Thanksgiving Holiday - No classes |
| December 5 | Thursday | Last day of scheduled classes for weekday classe |
| December 5 | Friday | Study day - No classes |
| December 7-December 13 | Saturday-Friday | Final examinations |
| December 13 | Friday | End of term |
| December 16 | Monday | All grades due by noon |
| December 19 | Friday | Grades available in JagWire |
| December 17 | Thursday | Commencement |
| December 24-January 1 | Tuesday-Wednesday | Winter Break |

Fall 2024 QMBS 3360:900, Business Statistics II Class Schedule

The provisions and information set forth in the schedule below are intended to be informational and not contractual in nature. I reserve the right to amend, alter, change, delete or modify the provisions of the schedule. All the changes will be announced in class and posted as a Blackboard announcement. You are responsible for all announcements made in class and through Blackboard.

| <i>Week</i> | <i>Dates</i> | <i>Chapter and Topic</i> | <i>Due Day and Time</i> |
|-------------|-----------------|--|------------------------------|
| 1 | Aug 26 – Sep 1 | Introduction /Prior Statistics Material | |
| 2 | Sep 2 – Sep 8 | Chapter 9 Hypothesis Tests | |
| 3 | Sep 9 – Sep 15 | Chapter 9 Hypothesis Tests | |
| 4 | Sep 16 – Sep 22 | CH 10 Inference about Means and Proportions | |
| 5 | Sep 23 – Sep 29 | CH 10 Inference about Means and Proportions | |
| 6 | Sep 30 – Oct 6 | Exam 1 | Exam 1 |
| 7 | Oct 7 – Oct 13 | CH 11 Statistical Inference about Population Variance | |
| 8 | Oct 14 – Oct 20 | CH 11 Statistical Inference about Population Variance | |
| 9 | Oct 21 – Oct 27 | CH 12 Tests of Goodness of Fit | |
| 10 | Oct 28 – Nov 3 | Exam 2 | Exam 2 |
| 11 | Nov 4 – Nov 10 | CH 13 Chi-Square Tests | |
| 12 | Nov 11 – Nov 17 | CH 13 Chi-Square Tests | |
| 13 | Nov 18 – Nov 24 | CH 14 Simple Linear Regression Analysis | Univ Closed Nov 27-30 |
| 14 | Nov 25 – Dec 5 | CH 14 Simple Linear Regression Analysis | |
| 15 | Dec 6 – Dec 13 | Reading Days Dec 8 – Classes do NOT meet. Final Exams Dec 9-15 – As per University Schedule | |

IMPORTANT POLICIES AND RESOURCES

Academic Accommodations for Individuals with Disabilities: Texas A&M University-San Antonio is committed to providing all students with reasonable access to learning opportunities and accommodations in accordance with The Americans with Disabilities Act, as amended, and Section 504 of the Rehabilitation Act. If you experience barriers to your education due to a disability or think you may have a disability, Disability Support Services is located in the Central Academic Building, Suite 210. You can also contact us via phone at (210) 784-1335, visit us <https://www.tamusa.edu/Disability-Support-Services/index.html> or email us at dss@tamusa.edu. Disabilities may include, but are not limited to, attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability-related needs with Disability Support Services and their instructors as soon as possible.

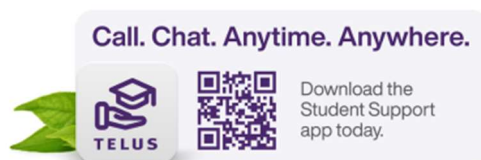
Academic Learning Center: The Academic Learning Center provides free course-based tutoring to all currently enrolled students at Texas A&M University-San Antonio. Students wishing to work with a tutor can make appointments through the Brainfuse online tutoring platform. Brainfuse can be accessed in the Tools section of Blackboard. You can contact the Academic Learning Center by emailing tutoring@tamusa.edu, calling (210) 784-1307, or visiting the Central Academic Building, room 202.

Counseling/Mental Health Resources: As a college student, there may be times when personal stressors interfere with your academic performance and negatively impact your daily functioning. If you are experiencing emotional difficulties or mental health concerns, support is available to you through the Student Counseling Center (SCC). To schedule an appointment, call 210-784-1331 or visit Madla 120.

All mental health services provided by the SCC are free and confidential (as the law allows). The Student Counseling Center provides brief individual and group therapy, crisis intervention, consultation, case management, and prevention services. For more information on SCC services visit tamusa.edu/studentcounseling

Crisis support is available 24/7 by calling the SCC at 210-784-1331 (after-hours select option '2').

Additionally, the TELUS Student Support App provides a variety of mental health resources to including support for in the moment distress, an anonymous peer to peer support network, mental health screenings, podcasts, and articles to improve your mental wellbeing.



Emergency Preparedness: JagE Alert is Texas A&M University-San Antonio's mass notification. In the event of an emergency, such as inclement weather, students, staff and faculty, who are registered, will have the option to receive a text message, email with instructions and updates. To register or update your information visit: <https://tamusa.bbcportal.com/>.

More information about Emergency Operations Plan and the Emergency Action Plan can be found here: <https://www.tamusa.edu/about-us/emergency-management/>.

Download the SafeZone App (<https://safezoneapp.com/>) for emergencies or call (210) 784-1911. Non-Emergency (210) 784-1900.

Financial Aid and Verification of Attendance: According to the following federal regulation, 34 CFR 668.21: U.S. Department of Education (DoE) Title IV regulation, a student can only receive Title IV funds based on Title IV eligibility criteria which include class attendance. If Title IV funds are disbursed to ineligible students (including students who fail to begin attendance), the institution must return these funds to the U.S. DoE within 30 days of becoming aware that the student will not or has not begun attendance. Faculty will provide the Office of Financial Aid with an electronic notification if a student has not attended the first week of class. Any student receiving federal financial aid who does not attend the first week of class will have their aid terminated and returned to the DoE. Please note that any student who stops attending at any time during the semester may also need to return a portion of their federal aid.

Writing, Language, and Digital Composing Center: The Writing, Language, and Digital Composing Center supports graduate and undergraduate students in all three colleges as well as faculty and staff. Tutors work with students to develop reading skills, prepare oral presentations, and plan, draft, and revise their written assignments. Our language tutors support students enrolled in Spanish courses and students composing in Spanish for any assignment. Our digital studio tutors support students working on digital projects such as eportfolios, class presentations, or other digital multimedia projects. Students can schedule appointments through JagWire under the Student Services tab. Click on “Writing, Language, and Digital Composing Center” to make your appointment. The Center offers face-to-face, synchronous online, and asynchronous digital appointments. More information about what services we offer, how to make an appointment, and how to access your appointment can be found on our website at <https://www.tamusa.edu/academics/>.

Meeting Basic Needs: Any student who has difficulty affording groceries or accessing sufficient food to eat every day or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to submit a CARE referral (<https://www.tamusa.edu/university-policies/Student-Rights-and-Responsibilities/file-a-report.html>) for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to direct you to available resources.

Military Affairs: Veterans and active-duty military personnel are welcomed and encouraged to visit the Office of Military Affairs for any question involving federal or state VA Education Benefits. Visit the Patriots’ Casa building, room 202, or to contact the Office of Military Affairs with any questions at military.va@tamusa.edu or (210)784-1397.

Religious Observances: Texas A&M University-San Antonio recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or course work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes for regular session classes.

The Six-Drop Rule: Students are subject to the requirements of Senate Bill (SB) 1231 passed by the Texas Legislature in 2007. SB 1231 limits students to a maximum of six (6) non-punitive course drops (i.e., courses a student chooses to drop) during their undergraduate careers. A non-punitive drop does not affect the student’s GPA. However, course drops that exceed the maximum allowed by SB 1231 will be treated as “F” grades and will impact the student’s GPA.

Statement of Harassment and Discrimination: Texas A&M University-San Antonio is committed to the fundamental principles of academic freedom, equal opportunity, and human dignity. To fulfill its multiple missions as an institution of higher learning, A&M-San Antonio encourages a climate that values and nurtures collegiality and the uniqueness of the individual within our state, nation, and world. All decisions and actions involving students and employees should be based on applicable law and individual merit. Texas A&M University-San Antonio, in accordance with applicable federal and state law, prohibits discrimination, including harassment, on the basis of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation, gender identity, gender expression, or pregnancy/parenting status. Individuals who believe they have experienced harassment or discrimination prohibited by this statement are encouraged to contact the appropriate offices within their respective units.

Texas A&M University-San Antonio faculty are committed to providing a safe learning environment for all students and for the university as a whole. If you have experienced any form of sex- or gender-based discrimination or harassment, including sexual assault, sexual harassment, domestic or dating violence, or stalking, know that help and support are

available. A&M-San Antonio's Title IX Coordinator can support those impacted by such conduct in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, and more. The university strongly encourages all students to report any such incidents to the Title IX Coordinator. Please be aware that all A&M-San Antonio employees (other than those designated as confidential resources such as counselors and trained victim advocates) are required to report information about such discrimination and harassment to the university. This means that if you tell a faculty member about a situation of sexual harassment, sexual violence, or other related misconduct, the faculty member must share that information with the university's Title IX Coordinator (titleix@tamusa.edu, 210-784-2061, CAB 439K). If you wish to speak to a confidential employee who does not have this reporting requirement, you can contact the Student Counseling Center at (210) 784-1331 or visit them in Madla 120.

Pregnant/Parenting Students: Texas A&M-San Antonio does not require a pregnant or parenting student, solely because of that status or issues related to that status, to (1) take a leave of absence or withdraw from their degree or certificate program; (2) limit the student's studies; (3) participate in an alternative program; (4) change the student's major, degree, or certificate program; or (5) refrain from joining or cease participating in any course, activity, or program at the University. The university will provide such reasonable accommodations to pregnant students as would be provided to a student with a temporary medical condition that are related to the health and safety of the student and the student's unborn child. These could include maintaining a safe distance from substances, areas, and activities known to be hazardous to pregnant individuals and their unborn child; excused absences because of illness or medical appointments; modified due dates for assignments; rescheduled tests/exams; taking a leave of absence; and being provided access to instructional materials and video recordings of lectures for excused absences, if these would be provided to any other student with an excused absence. Pregnant/parenting students are encouraged to contact the Title IX Coordinator with any questions or concerns related to their status (titleix@tamusa.edu; 210-784-2061; CAB 439K).

Texas A&M-San Antonio has also designated the Title IX Coordinator as the liaison officer for current or incoming students who are the parent or guardian of a child younger than 18 years of age. The Title IX Coordinator can provide students with information regarding support services and other resources.

Students' Rights and Responsibilities: The following statement of students' rights and responsibilities is intended to reflect the philosophical base upon which University Student Rules are built. This philosophy acknowledges the existence of both rights and responsibilities, which is inherent to an individual not only as a student at Texas A&M University-San Antonio but also as a citizen of this country.

Students' Rights

1. A student shall have the right to participate in a free exchange of ideas, and there shall be no University rule or administrative rule that in any way abridges the rights of freedom of speech, expression, petition and peaceful assembly as set forth in the U.S. Constitution.
2. Each student shall have the right to participate in all areas and activities of the University, free from any form of discrimination, including harassment, on the basis of race, color, national or ethnic origin, religion, sex, disability, age, sexual orientation, gender identity, gender expression, and pregnancy/parenting or veteran status in accordance with applicable federal and state laws.
3. A student has the right to personal privacy except as otherwise provided by law, and this will be observed by students and University authorities alike.
4. Each student subject to disciplinary action arising from violations of university student rules shall be assured a fundamentally fair process.

Students' Responsibilities

1. A student has the responsibility to respect the rights and property of others, including other students, the faculty, and administration.
2. A student has the responsibility to be fully acquainted with the published University Student Rules found in the Student Handbook, Student Code of Conduct, on our website, and University Catalog, and to comply with them, as well as with federal, state, and local laws.
3. A student has the responsibility to recognize that student actions reflect upon the individuals involved and upon the entire University community.
4. A student has the responsibility to recognize the University's obligation to provide a safe environment for learning.
5. A student has the responsibility to check their university email for any updates or official university notifications.

We expect that students will behave in a manner that is dignified, respectful, and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation, or disability. Conduct that infringes on the rights of another individual will not be tolerated.

Students are expected to exhibit a high level of honesty and integrity in their pursuit of higher education. Students engaging in an act that violates the standards of academic integrity will find themselves facing academic and/or disciplinary sanctions. Academic misconduct is any act, or attempt, which gives an unfair advantage to the student. Additionally, any behavior specifically prohibited by a faculty member in the course syllabus or class discussion may be considered as academic misconduct. For more information on academic misconduct policies and procedures please review the Student Code of Conduct (<https://www.tamusa.edu/university-policies/student-rights-and-responsibilities/documents/Student-Handbook-2022-23.pdf>) or visit the resources available in the OSRR website (<https://www.tamusa.edu/university-policies/student-rights-and-responsibilities/academic-integrity.html>).

No Use of Generative AI permitted: [QMBS 3360-900] assumes that all work submitted by students will be generated by the students themselves, working individually or in groups. Students should not have another person/entity do the writing of any portion of an assignment from them, which includes hiring a person or a company to write assignments and/or using artificial intelligence (AI) tools like ChatGPT. Use of any AI-generated content in this course qualifies as academic dishonesty and violates Texas A&M-San Antonio's standards of academic integrity.