



Dillard College of Business Administration

Business and Economic Statistics

BUAD 3033, Section X-20

Spring 2024

Online

Contact Information:

Instructor: Dr. Sanchari Choudhury

Office: Dillard Building 220

Contact: Email me at any "reasonable" time, as I am usually available via email.

Phone: 940.397.4834

Email: sanchari.choudhury@msutexas.edu

Text:

Anderson, Sweeney, Williams, Camm, Cochran, Fry and Ohlmann, Statistics for Business and Economics, 14th Edition, Cengage Learning (Required).

Accessing the e-book for this course:

There is a link in D2L where you can purchase your book on your own, or you can purchase from the booklist on your phone. Once you log into msutexasbookstore.com, enter your MSU ID# with the "M", and pay for the book with a CC.

If any of you have another entity paying for your books, you may drop by the MSU Bookstore or call them at (940) 397-4303.

Course Description:

This course introduces students to statistical application methods. Students will learn how to collect, manage, analyze, and interpret business data. Successful completion of the course will allow students to access the information obtainable from a dataset and present the information in a concise and meaningful form. Covered topics include descriptive statistics, probability theory, hypothesis testing, correlation, and regression analysis. The course emphasizes business and economic applications.

Learning Goals:

The general objective of this course is to help participants understand fundamental statistical

methods and their applications to economic and business issues. One will gain an understanding and mastery of the relationship and application of statistical methods to real life issues.

A. General Learning Goals:

1. Effective critical thinking and problem-solving skills using statistical methods: Participants will demonstrate their proficiency in critical thinking and problem solving and decision-making abilities by applying statistical methods through homework, in class discussions, and exams.
2. Communication skills: Participants will demonstrate their effective and efficient communication skills when reporting results of statistical analyses.
3. Social Responsibilities: Participants will demonstrate their intercultural competency, civic knowledge, and the abilities to engage effectively in regional, national, and global economic and business issues.
4. Personal Responsibilities: Participants will demonstrate connecting choices, actions, and consequences to statistical analysis and ethics abilities.

These general learning goals represent or are related to those established by the Dillard College of Business Administration. The goals represent the skills that graduates will carry with them into their careers. While assessing student performance in obtaining these general learning goals, the College seeks to assess its programs. The assessments will assist us as we improve our curriculum and curriculum delivery.

B. Course Specific Learning Goals:

- Understand statistical methods used to describe data
- Learn probability theory
- Learn sampling methods
- Understand confidence intervals
- Understand hypothesis testing
- Conduct correlation analysis
- Conduct regression analysis

Teaching Method:

This is an online class starting on January 16, 2024, and ending on May 10, 2024, as per the 2023-24 academic calendar. The two main learning modes here are reading the textbook and watching the lecture videos that I will upload on critical concepts. Reading the textbook (mentioned earlier) is **mandatory** to understand every concept thoroughly and perform well in the course because lecture videos cannot possibly include every detail of a concept. Power-point slides and study guides on each chapter will also be uploaded on D2L to *assist* your learning. We will use Excel now and again for our practical learning. It will be communicated through emails and lecture videos on D2L. Moreover, you can reach out to me anytime during the week through email (see above under "Contact Information") if you are stuck with anything or have any questions in mind.

Every week, you are expected to finish one module on D2L. Therefore, sixteen modules in total. It will generally follow the same pattern: You will learn the materials from Tuesdays through Sundays, and your assignments will be due on Mondays, except for the Case Studies; these may have deadlines anytime during the week. All the assignments, including exams, will be conducted through D2L. Instructions for every assignment will be available on D2L and communicated through emails. Refer to the course schedule provided at the end of the syllabus to get an idea. It is also tentatively outlined on D2L as weekly modules. You are expected to check your D2L email regularly for any announcements about this class.

Course Policies:

A. Attendance Policy:

Since this is an online class, attendance will be checked through assignment submissions. Missing 4 assignments or an exam from 01/16/2024 to 02/19/2024 will be considered excessive. Students who reach this level of missed assignments will be automatically dropped with a grade of "F" given the university attendance policy. In addition to this, missing 6 assignments during the semester is also excessive; students who reach this level of missed assignments will get a final grade of "F" given the university attendance policy. You may find this information in the Student Handbook and Activities Calendar at [Handbook](#).

B. Other Course Related

Policies Academic Integrity:

As for academic honesty, students must follow the "Student Honor Creed" presented in the [Student Handbook of MSU TX](#) and failure to do so will call for sanctions.

Also, since all your assignments will be conducted through D2L, academic integrity is also applicable in this case. If I learn of students sharing the quiz/assignment contents in any way, that is a breach of academic integrity on all parties' part. Please don't do that, as I don't want to give everyone involved a 0 for the assignments (and potentially an F for the course).

Americans with Disability Act:

Any student who, because of a disability, may require special arrangements in order to meet the requirements of this course should contact the instructor as soon as possible to make necessary arrangements. Students must present appropriate verification from the University's Disability Support Services (DSS) office to the instructor over email or virtual office hours. Please note that instructors are not allowed to provide any accommodations to a student on the basis of disability until appropriate verification from DSS has been provided by the student. (See the section on "Disability Support Services" in the Student Handbook for reference).

Campus Carry Policy

Senate Bill 11 passed by the 84th Texas Legislature allows licensed handgun holders to

carry concealed handguns on campus, effective August 1, 2016. Areas excluded from concealed carry are appropriately marked, in accordance with state law. For more information regarding campus carry, please refer to the University's webpage at [campus handgun policy](#).

Syllabus Change Policy:

This syllabus is a guide for the course and is subject to change with an advanced notice.

Correspondence:

All email correspondence must be conducted using your **Midwestern State University (MSU) email** only. I will not respond to any question sent from any other email account. It is highly recommended that you regularly monitor your both MSU email account and that of D2L. For your own convenience, I suggest that you link your D2L emails with your MSU email account such that any incoming message to D2L account will get automatically forwarded to your MSU email account. Note, grades will be posted on D2L and on MSU Banner and not sent over email.

Technical Support:

I, as your instructor for an economics class can only ensure that all the course materials are in working order but beyond that I cannot provide any technical support to a student's hardware/software problems. For problems related to D2L, a student is recommended to contact [MSU Distance Education](#).

Late Submissions:

For homework assignments, I highly recommend that students not wait until the last minute to make their submissions. Since all your assignments, case studies and exams will be through D2L, we are heavily dependent on technology that may decide to abandon us at a crucial moment. Therefore, start working on assignments in advance. Any late submission needs prior permission from me and will automatically incur a penalty of ten points unless provided with a compelling reason.

For exams, no make-up exam will be allowed unless a student requests my approval in advance *and* for compelling reasons. If you miss an unexcused exam, you receive a zero and there is **no** exception to this policy.

Lastly, if you have any questions or concerns about your grades, bring that to my attention within one week of the homework/exam is graded.

Monitoring of Exams:

All exams taken on D2L will require Respondus Lockdown Browser and Webcam monitoring. So, every student is expected to have access to a webcam from the beginning of the semester. However, these monitoring tools are **not** compatible with Chromebook Laptop, Phones and Tablets. iPad can be used but you need to allow it in the setup. Contact [MSU Distance Education](#) to get proper instructions to execute this.

Grading and Evaluation Measures:

Exams: There will be three (non-cumulative) exams altogether, each of equal weight (19% each). So, **57% of your final grade** depends on your exam performance. This will mainly test your problem-solving ability as you need to *recognize the concept(s)* embedded in each question and then *apply* the concepts learned throughout the course to answer the question correctly. There will be hardly any direct questions in these exams. So, understanding the materials is the only way to succeed in this course, not rote learning.

Homework Assignments: There will be altogether 14 homework assignments, each based on a chapter. These will help you prepare for your exams. But you will never get exactly the same questions on your exams. These assignments will together contribute to **20% of your final grade**. As the course progresses, more information and details will be communicated through emails and on D2L.

Case Study: There will be two case studies altogether in this course that will contribute to **18% of your final grade**. This will evaluate the practical learning aspect of the materials. As we progress, detailed instructions about this assignment will be communicated through emails and on D2L.

Excel Certification: **5% of your final grade** will depend on an Excel Certification exam that will ensure you are proficient in working with the Excel software package to manage basic data analysis with it. This will be discussed in more detail in class, and you will get two attempts in total to successfully receive the certification.

Every student is expected to be in touch with me throughout the semester regarding their performances and grades to avoid any semester-end “surprises.”

Grading Scale:

A = 90-100%

B = 80-89%

C = 70-79%

D = 60-69%

F = <60%

Note: Final grades MAY be curved depending on the situation and the instructor's discretion. If a curve is implemented in the current semester, students will be communicated about the same before posting the final grades.

Class Schedule:

First day of class: January 16 (Tuesday)
 No class/office hours: March 9 (Saturday) 5 pm – March 16 (Saturday) — Spring Break
 March 27 (Wednesday) 10 pm – March 31 (Sunday) — Easter Break
 Last day for “W”: ~~March 25 (Monday)~~ by 4 pm (drops after this will receive “F”)
 Exam 1: February 19 (Monday) (*confirmed*)
 Exam 2: April 8 (Monday) (*confirmed*)
 Exam 3: May 6 (Monday) (*confirmed*)

April 24
(Wednesday)
instead

Course Schedule (tentative)

Weekly Modules	Chapters	Homework Assignments
Week 1 (January 16 - 22)	Go through the syllabus thoroughly 1 (Data and Statistics)	HW 1: due January 22 (Monday)
Week 2 (January 23 - 29)	2 (Descriptive Stats: Tables & Graphs) 3 (Descriptive Stats: Numerical Measures)	HW 2 and HW 3: due January 29 (Monday)
Week 3 (January 30 – February 5)	4 (Probability Theory)	HW 4: due February 5 (Monday)
Week 4 (February 6 – 12)	5 (Discrete Probability Distributions)	HW 5: due February 12 (Monday)
Week 5 (February 13 - 19)	Review Chapters 1, 2, 3, 4 and 5 Start Working on the First Case Study	Exam 1: due February 19 (Monday)
Week 6 (February 20 – 26)	6 (Continuous Probability Distributions)	Case Study I: due February 23 (Friday) HW 6: due February 26 (Monday)
Week 7 (February 27 – March 4)	7 (Sampling and Sampling Distributions)	HW 7: due March 4 (Monday)
Week 8 (March 5 – 11)	8 (Interval Estimation)	
Week 9 (March 12 - 18) <i>With Spring Break from March 9</i>	8 (Interval Estimation) revisit	HW 8: due March 18 (Monday)

<i>(5 pm) to March 16</i>		
Week 10 (March 19 - 25)	9 (Hypothesis Testing)	HW 9: due March 25 (Monday) Excel Certification – Attempt 1: due March 19 (Tuesday) but tentatively
Week 11 (March 26 – April 1) <i>With Holiday Break from March 27 (10 pm) – March 31</i>	10 (Two Populations)	HW 10: due April 1 (Monday)
Week 12 (April 2 - 8)	Review Chapters 6, 7, 8, 9 and 10 Start Working on the Second Case Study	Exam 2: due April 8 (Monday)
Week 13 (April 9 - 15)	11 (Population Variances) 12 (Multiple Proportions and Goodness of Fit)	HW 11 and HW 12: due April 15 (Monday)
Week 14 (April 16 - 22)	14 (Simple Linear Regression)	Case Study II: due April 19 (Friday) HW 13: due April 22 (Monday)
Week 15 (April 23 – 29)	15 (Multiple Regression)	HW 14: due April 29 (Monday) Excel Certification – Attempt 2: due April 23 (Tuesday) but tentatively
Week 16 (April 30 – May 6)	Review Chapters 11, 12, 14 and 15	Exam 3: due May 6 (Monday)