

Online Math 2345-Spring 2020 Business Statistics

Professor: Dr. Kathleen Gilliam

Office: Math 117B

Email: kathleen.gilliam@ttu.edu

Office Hours: MWF 11:20 am to 11:50 pm and 2:00 pm to 3:30 pm

Teaching Assistants: See announcements for full details on TA's

WEB Site: <http://www.math.ttu.edu/~xgilliam>

Prerequisites: Math 13xx with at least grade of C. **Textbook:** “Modern Business Statistics” (6e, by Anderson, Sweeney, Williams, Camm, and Cochran)

Civility in the Classroom: Students are expected to assist in maintaining a classroom environment that is conducive to learning. In order to assure that all students have an opportunity to gain from time spent in class, troublesome behavior will not be tolerated. At a minimum, this includes using cellular phones, making offensive remarks, reading newspapers, sleeping or engaging in any other form of distraction.

Honesty: Any acts of scholastic dishonesty such as cheating, plagiarism, and collusion are not allowed.

Daily Homework, On-line Homework and Quizzes: Daily Homework will be assigned from the textbook. There will be 9 multiple choice quizzes and 8 on-line Homework sets based on the daily Assignments. For the quizzes, the two lowest quiz scores will be dropped and the remaining scores will be worth 15% of the final grade. For the on-line Homework, you have up to three chances to attempt the questions and the best score will be recorded. Note that the Homework deadline is at 11:59 pm of the due dates. The Homework assignment due dates are made available well in advance. You will also be reminded of these due dates as the time approaches. There is no acceptable excuse for contacting me after the due date expecting me to reopen a set for you. This includes complaints about software problems near the due date. My advice is don't wait until the last minute to turn in the on-line Homework. The best six on-line Homework scores will be worth 10% of the final grade.

On-line Homework (MindTap):

1. Login to Blackboard (Allow pop-ups).
2. Find the course.
3. Follow the prompts to register your MindTap Course.

Tests: There will be three midterms and a **Comprehensive** final. For each test you need to bring an orange scantron sheet, pencils, and a calculator. Each of the three midterms will be worth 20% and the final exam will be worth 15%.

Make-up Exams and Quizzes: Requests for make-ups will be granted **ONLY** when accompanied by a letter from an appropriate university official, i.e. the Dean of Students. In all other cases, no make-up will be given, and the procedures outlined in this syllabus will be followed. **There are no exceptions to this rule.**

Grading Policies: Grades will be assigned based on your overall course average:

90%-100%	A	80%-89.9%	B	70%-79.9%	C
60%-69.9%	D	59.9% and below	F		

Lectures: The schedule below indicates the daily topics to be covered in class, the due dates for the dates for the exams and quizzes.

Math 2345 Calendar (New online--Spring 2020)

Date Material Covered Description

Text Readings (**Homework**)

Mar. 30 Review for EX2

Apr. 1 Ch12 Chi-Square Test for proportions and setup_test Ch 12.3 (pg554-555: #17, #18, #20)

Apr. 3 Exam 2 (CH7-CH10)

Apr. 6 Ch14 Linear Regression Model

Ch 14.1-3 (pg631: #2; pg643: #16, #18)

Apr. 8 Ch14 Testing and Interval Estimation

Ch 14.5 (pg655: #26, pg661: #32, #36)

Apr.10 Ch15 Intro. Multiple Regression and **Quiz 7**

Ch 15.1-3 (pg715-716: #1, #4; pg722: #14)

Apr. 15 Ch15 Testing for Multiple Regression

Ch 15.4-5 (pg729: #20; pg750: #46)

Apr.17 Ch19 Intro to Xbar and R Charts and **Quiz 8**

Ch 19.1-2 (pg931: #2, #4)

Apr. 20 Ch 19 Intro to P Chart

Ch 19.2 (pg932: #8)

Apr.22 Remarks and **Quiz 9**

Apr. 24 Review for EX3

Apr. 27 Exam 3 (CH12, CH14, Ch15, and Ch19)

Apr. 29 Ch17 Intro to Time-Series Analysis

Ch 17 (pg826: #6)

May 1 Review for the final (1)

May 4 Review for the final (2)

Final Exam 12:00 MWF Section: Friday, May 8, 1:30 PM—4:00 PM

Final Exam 1:00 MWF Section: Thursday, May 7, 1:30 PM—4:00 PM

On-line Homework Schedules

ASSIGNMENT # (Starting)	CHAPTERS	DUE DATES
Assignment 1 (Jan. 15)	Introduction to Using Aplia	Jan. 31
Assignment 2 (Jan. 27)	Ch 3 Numerical Measures	Feb. 7
Assignment 3 (Feb. 7)	Ch 5 Discrete Distribution	Feb. 17
Assignment 4 (Feb. 12)	Ch 6 Normal Distribution	Feb. 21
Assignment 5 (Feb. 24)	Ch 8 Confidence Interval	Mar. 6
Assignment 6 (Feb. 28)	Ch 9 Hypotheses Testing	Mar. 30
Assignment 7 (Mar. 30)	Ch14 Linear Regression	Apr. 20
Assignment 8 (Apr. 8)	Ch15 Multiple Regression	May 4

Disabled Students: Please advise me of your condition and provide a letter of verification as soon as possible. I will make necessary accommodation.

Student absence for Observance of Religious Holy Day: Please advise me of your absence prior to the event and I will make necessary accommodation.

Student learning outcomes and assessment: Students will learn the meanings of, and computational procedures related to, the elementary statistical concepts used for making decisions in business and economics. In particular, students will

1. Appreciate the role of statistics in business decision making.
2. Understand the need to be wary of statistical claims, common pitfalls in sampling, and misrepresentation of conclusions.
3. Understand the meanings of various statistical measures, including the mean, median, mode, standard deviation, variance, and quartiles.
4. Become familiar with various graphical representations of data and learn to recognize misleading graphs.

5. Develop proficiency in real-world probability problems.
6. Understand the concept of a probability distribution and real-world problems, involving the binomial and normal distributions.
7. Understand and apply the Central Limit Theorem.
8. Compute and interpret confidence intervals.
9. Conduct and interpret hypothesis tests.
10. Understand linear regression models.
11. Understand the construction and use of control charts.
12. Understand the based concepts of time series.

Printing the Class Notes: Please print the class notes prior to the classes. The notes are available in PDF format on the class website through the box that says **Class Handouts:**

http://www.math.ttu.edu/~xgilliam/classes/m2345/math_2345.htm

New Information for Online Delivery of the Course

Statement Concerning Proctorio Online Testing:

All students must review the syllabus and the requirements including the online terms and video testing requirements to determine if they wish to remain in the course. Enrollment in the course is an agreement to abide by and accept all terms. Any student may elect to drop or withdraw from this course before the end of the drop/add period.

Online exams and quizzes within this course may require online proctoring. Therefore, students will be required to have a webcam (USB or internal) with a microphone when taking an exam or quiz. Students understand that this remote recording device is purchased and controlled by the student and that recordings from any private residence must be done with the permission of any person residing in the residence. To avoid any concerns in this regard, students should select private spaces for the testing. The University library and other academic sites at the University offer secure private settings for recordings and students with concerns may discuss location of an appropriate space for the recordings with their instructor or advisor. Students must ensure that any recordings do not invade any third party privacy rights and accept all responsibility and liability for violations of any third party privacy concerns. Setup information will be provided prior to taking the proctored exam. For additional information about online proctoring, you can visit the online proctoring student FAQ.

<https://www.depts.ttu.edu/elearning/blackboard/proctorio/proctorio-student-faq.php>

Important Note:

You must install the Proctorio extension in Google Chrome and work the setup_test (must be completed before April 1 on blackboard): You are required to do the setup_test to ensure your Chrome Browser is prepared to take Exam 2.