ECO 302 – Business and Economic Statistics
Spring 2026 – 3 credit hours - Section

Instructor: Ellis Reeves, M.Ed.
Email: TBD
Phone: 803-476-6869 (Cell)
Virtual Office Hours: Mondays & Fridays, 9am-11am

Required Texts: *Introductory Business Statistics (2e)* – OpenStax (Free, CC BY 4.0)
This is an open educational resource so there will be no cost associated with the text. A link will be provided in the course shell.

Required Technologies: D2L Brightspace, Microsoft Excel, and AI systems will be used during this course.

Course Description: This course introduces students to descriptive statistics (measures of central tendency and variation and representing data graphically) and statistical inference. Inference will involve sampling techniques, estimation, hypothesis testing and simple regression. Applications emphasize continuous improvement of products and services.

Electronic system to use during the course:

Students will find some course materials in the D2L Brightspace course shell. 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@tamuc.edu**.**

LMS Requirements:
https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:
https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

If you are having technical difficulty with any part of D2L Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:
https://community.brightspace.com/support/s/contactsupport

COURSE OBJECTIVES

After successfully completing this course, you will:
1. Use Excel to generate descriptive statistics and be able to summarize and interpret the results
2. Create and evaluate data visualizations in Excel.
3. Understand the concepts of sampling to ensure appropriate Excel inputs.
4. Use Excel to construct and interpret confidence intervals for business decisions.
5. Understand how Excel used for hypothesis testing and inference, including simple linear regression models.
6. Learn effective uses of AI in statistical analysis.

Grade Evaluation

Grade Evaluation	Percentage
Discussion Boards (5 Total)	10%
Quizzes (5 Total)	20%
Assignments/Projects (5 Total)	30%
Midterm Exam	20%
Final Exam	20%
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TOTAL	100%

Grade Conversion

A = 90 or higher
B = 80% - 89%
C = 70% - 79%
F = 69%

Description of Evaluation Criteria

Discussion Boards – These will largely be based on case studies that we will discuss as a class. For all discussion board posts, it is required that you do an initial post and then respond to two peers prior to the deadline. The earlier, the better for these.

Quizzes – Quizzes will be paired with discussions. They will test your knowledge on the case study and the readings from that module.

Assignments – All assignments that fall into the assignment grading category start with "Assignment" in the title. Since much of what we are learning is technology based, this is a large chunk of your grade.

Midterm – The midterm exam will evaluate your knowledge on all topics learned in the first half of the course (Modules 1-8).

Final Exam – The final exam will evaluate your knowledge on all topics learned in the second half of the course.

Preferred Way to be Contacted: Please feel free to message me through our course shell, my personal email ellisreeves4@gmail.com, or my Texas A&M email address.

Attendance: Review of the course material is required for this course. While we will not have traditional attendance, I do expect for you to actively review all material and participate in all class activities and assignments.

Late Work Policy: I am a doctoral student myself, so I do not have a lot of extra time to accept late work. I will allow one late submission per student at a -25% point reduction.

Syllabus Change Policy: The syllabus is a guide. Circumstances and events, such as student progress or current events, may make it necessary/desirable 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 in the [Student Guidebook](http://www.tamuc.edu/admissions/registrar/documents/studentGuidebook.pdf).
http://www.tamuc.edu/admissions/registrar/documents/studentGuidebook.pdf

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: [Netiquette](http://www.albion.com/netiquette/corerules.html)
http://www.albion.com/netiquette/corerules.html

TAMUC Attendance: For more information about the attendance policy please visit the [Attendance](http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx) webpage and [Procedure 13.99.99.R0.01](http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx).
http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

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

[Undergraduate Academic Dishonesty 13.99.99.R0.03](http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf)

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

[Graduate Student Academic Dishonesty 13.99.99.R0.10](http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf)

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

Empowering Responsible and Ethical Use of AI: I encourage the use of AI tools, such as ChatGPT, to enhance your learning experience. AI can be a powerful resource for generating ideas, conducting research, and improving analytical skills. However, it is crucial to use these tools responsibly/ethically to maintain the integrity of your work and uphold academic standards.

Acceptable Use of AI:
1. **Research and Idea Generation:** Use AI to help brainstorm topics, generate ideas, and gather preliminary information.
2. **Data Analysis Assistance:** Employ AI tools for assistance with data analysis, such as creating graphs and visualizations in Excel.
3. **Improving Writing:** Use AI for proofreading to enhance the clarity, grammar, and structure of your writing.

4. **Learning and Skill Development:** Engage with AI to improve your understanding of course material and develop relevant skills, such as prompt engineering and metrics development.

Unacceptable Use of AI:

1. **Plagiarism:** Submitting AI-generated content as your own without proper attribution is strictly prohibited. All work must be original and reflect your own understanding and effort.
2. **Cheating:** Using AI to complete assignments, quizzes, or exams, undermining the learning process, is not allowed.
3. **Fabrication of Data:** Generating or altering data using AI tools to misrepresent research findings or results is unacceptable.
4. **Misrepresentation:** Presenting AI-generated content or ideas your own is prohibited.

Guidelines for Responsible Use:

1. **Cite AI Sources:** If you use AI tools to gather information or generate content, provide appropriate citations and acknowledge the use of these tools in your work.
2. **Maintain Academic Integrity:** Ensure that your submissions reflect your own understanding, analysis, and synthesis of the material. Use AI as a supplement, not a substitute, for your learning and effort.
3. **Transparency:** Be honest about the extent to which AI has assisted you in your work. When in doubt, consult with the instructor on how to appropriately integrate AI into your assignments.
4. **Learn and Grow:** Use AI as a learning tool to enhance your knowledge and skills. Strive to understand and internalize the concepts rather than relying solely on AI outputs.

Consequences of Misuse: Violations of this AI policy will be treated as academic misconduct and will be subject to the university's academic integrity procedures. Penalties may include failing the assignment, failing the course, or further disciplinary action as outlined in the university's academic integrity policy. By adhering to these guidelines, you can effectively harness the power of AI to support your educational journey while maintaining the highest standards of academic integrity and professionalism.

<u>Students with Disabilities</u>
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 reasonable accommodation for their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University – Commerce
Waters Library, Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamuc.edu

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 based on race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination based on 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 your event organizer.

Web url:
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34Safet yOfEmployeesAndStudents/34.06.02.R1.pdf

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.

Semester Calendar

Module	Lectures, Readings, Activities	Assessments	Due Date
1	**Module 1: Course Introduction** Course Welcome and Introduction Review Syllabus and Requirements	**Welcome Discussion Board Post**	**Sunday, 1/18 at 11:59 PM**
2	**Module 2: Data Management and** **Formulas** **Instructor provided readings in LMS**	**Assignment 1: Vintage Music Album Collection**	**Sunday, 1/25 at 11:59 PM**
3 CO3	**Module 3: Sampling and Data** Lecture: Variable Types & Scales Reading: Ch.1 (pages 5-30)	**Discussion Board 1 Quiz 1**	**Sunday, February 1st at 11:59PM**

4 CO1	**Module 4: Descriptive Statistics** Reading: Chapter. 2 (pages 45-67)	**No Assessment Due**	**No Assessment Due**
5 CO1	**Module 5: Variation** Lecture Reading Ch. 2 (pages 68-87)	**Assignment 2: Testing Descriptive Statistics**	**Sunday, 2/15 at 11:59PM**
6 CO2	**Module 6: Data Visualization, Part 1** **Histograms, Graphs, Charts, and importance of visualizing data** **Lecture** **Reading: Venn Diagrams (page 163-200)**	**Assignment 3: Character Dashboards**	**Sunday, 2/22 at 11:59 PM**
7 CO3	**Module 7: Sampling Concepts** Lecture: Reviewing Sampling Methods and Bias Review Chapter 1 Content (specifically page 9-20) Kahoot Class Activity	**Assignment 4: Fallout Shelter Rental**	**Sunday, 3/1 at 11:59PM**
8	**Module 8: Midterm Exam** **Review Modules 1-7 for this midterm. Study guide will be provided.**	**Midterm Exam**	**Sunday, 3/8 at 11:59PM**
9	**Module 9: Spring Break Week**	**Spring Break Week**	**Spring Break Week**
10 CO4 CO5	**Module 10: Data Visualization, Part 2** Lecture: Optimizing Workbook Appearance		**Due Sunday, 3/22 at 11:59 PM**

11 CO6	**Module 11: Working with AI on Data and Statistics** **Lecture: Intro to AI** **Ethical Use of AI in Business** Article: [Five Trends in AI and Data Science for 2026](#)	**Discussion 2: AI Shaping the Future of How Business Use Data** **Quiz 2**	**Due Sunday, 3/29 at 11:59 PM**
12 CO4	**Module 12: Hypothesis Testing** Reading Chapter 9 (381-418)	**Assignment 4: Hypothesis Testing for Business Decision**	**Due April 5th, at 11:59 PM**
13 CO5	**Module 13: Correlation and Regression** Lecture Reading: Pages 551-570	**Assignment 5: Dashboard Regression Extension**	**Due April 12th, at 11:59 PM**
14 CO2 CO5	**Module 14: Seeing into the Future with Data** Lecture: Why Aging Analysis Is Important and Predictive Techniques Video	**Assignment 6: Accounts Payable Aging Report: Livingood Income Tax**	**Due April 19th at 11:59 PM**
15	**Module 15: Catch Up Module** **Final Exam Review**	**Please submit any missed assignments during this module. Each student is allowed one late submission at -25% points.**	**Due April 25th at 11:59 PM**
	Final Exam **Modules 10-15**	**Final Exam**	**Due Tuesday, May 5th at 11:59PM**