GENB 2300 – Business Statistics
Monday and Wednesday 2:30 pm – 3:55 pm, Spring 2025
COB 251

Instructor: Wesley B. Wilson, MBA **Email**: wewilson@uttyler.edu
(Canvas Email Preferred)

Office: COB 315.17 **Mobile Phone**: 832-386-5280 (text first)

Office Hours: By appointment via email. Zoom meetings can be scheduled by request.

Required Materials:
- **Textbook**: Camm, J. D., Cochran, J. J., Fry, M. J., & Ohlmann, J. W. (2020). Business analytics (4th edition). Cengage Learning
- **Required Software**: Access to Microsoft Excel. The full Microsoft Office suite, including Excel, is available for you as a student from UT Tyler IT at https://www.uttyler.edu/it/office365/365-proplus-students.php. It is suggested that you install Excel on your computer and install the "Data Analysis" module, which is free and required for some assignments. If you use the online version of Excel
- **Webcam and microphone access for ProctorU utilization during exams**. For additional information, please visit www.uttyler.edu/digital-learning/proctoru-resources/

Course Description:
Descriptive and inferential statistical techniques for business and economic decision making. Topics include the collection, description, analysis, and summarization of data; probability; discrete and continuous random variables; the binomial and normal distributions; sampling distributions; tests of hypotheses; estimation and confidence intervals; linear regression; and correlation analysis. Statistical software is used to analyze data throughout the course.

Course Objectives:
1. Describe the random processes underlying statistical studies.
2. Calculate and use probability in solving business problems.
3. Compute and interpret descriptive statistics.
4. Compute and interpret measures of central tendency and dispersion.
5. Calculate expected values to evaluate multiple outcomes of a decision.
6. Describe, interpret, and apply discrete and continuous probability distributions.
7. Construct and interpret confidence intervals for means and proportions.
8. Formulate, perform, and interpret hypothesis tests (one and two population parameters).
9. Calculate, evaluate, and interpret simple linear correlation/regression.
10. Use statistical software to graph, compute, and analyze statistical data.

Course Outline/Major Topics Studied:

Week	Beginning Date	Readings	Key Topics *Bonus Point Opportunity	Note
1	13 Jan	Ch1 Introduction	Introduction	Ch 1 Quiz Due 19 Jan
2	20 Jan	Ch2 Descriptive Statistics I	Types of Data, Modifying Data, Creating and Analyzing Distribution	**No Class 20 Jan - Holiday**
3	27 Jan	Ch2 Descriptive Statistics II	Measures of Location, Variability, Association between two variables	Ch2 HW/Quiz Due 02 Feb
4	03 Feb	Ch3 Data Visualization	Table Design Principles, PivotTables, Scatter and Line Charts	Ch3 HW/Quiz Due 09 Feb
5	10 Feb	Ch4 Probability I	Basic and Conditional Probability, Discrete/Continuous Variables	
6	17 Feb	Ch4 Probability II	Normal Probability Distribution	**No Class 19 Feb – AHRD** Ch4 HW/Quiz Due 23 Feb
7	24 Feb	*STUDY WEEK 1*	Exam Review & Bonus Activities	Optional Excel HW Resubmission Due 02 Mar
8	03 Mar	**Midterm Exam**	Ch 1, 2, 3, 4	**Midterm Due 09 Mar**
9	10 Mar	Ch6 Statistical Inference I	Sample and Population, Point Estimation	
SB	17 Mar	**Spring Break**		**No Class**
10	24 Mar	Ch6 Statistical Inference II	Sampling Distribution, Interval Estimation	
11	31 Mar	Ch6 Statistical Inference III	Hypothesis Testing	Ch6 HW/Quiz Due 06 Apr
12	07 Apr	Ch7 Linear Regression I	Simple Linear Regression Model, Least Squares Method	
13	14 Apr	Ch7 Linear Regression II	Assessing the Fit of the Regression Model, Inference and Regression	Ch7 HW/Quiz Due 20 Apr
14	21 Apr	*STUDY WEEK 2*	Exam Review & Bonus Activities	Optional Excel HW Resubmission Due 27 Apr
15	28 Apr	**Final Exam**	Ch 1, 2, 3, 4, 6, 7	**Final Exam Due 30 Apr**

Disclaimer: Course schedule is subject to change, and you will be responsible for abiding by any such changes.

Graded Course Requirements: Letter grades will be assigned based on the scale provided. Grades will not be rounded beyond that stated below. Students are responsible for verifying that all electronic submissions are correctly uploaded. All scores will be based on what is submitted by the deadline. The possible points for each assignment category are as follows:

Grade Composition:

Participation (5%)	5%
Chapter Assignment (45%)	
Excel Homework	25%
Quiz	20%
Exams (50%)	
Midterm	20%
Final	30%
Course Total	100%

Participation (5% of grade): Participation is a critical part of the class. Your participation grade will be graded based on your attendance and in-class participation. Students will be responsible to report an absence in advance to avoid penalty. ***Your active participation*** may increase your chance to receive bonus points throughout this course.

Chapter Assignments (45% of grade): "Chapter Assignments" is a critical part of the class, consisting of homework and quiz of each chapter. ***Late submissions will be penalized by 10% for any full or partial day late up to 3 days following the due date***. Submissions will be disabled after the third day.

1. **Excel Homework (25%):** Homework problems will be assigned to help students mainly learn quantitative tools and understand business analytics deeply (due: **11:59pm, Sunday**).
   a. You are required to turn in all assignments (**Excel files**) on Canvas. The guideline/template for assignments will be provided on Canvas. Please make sure to upload an appropriate Excel file (.xlsx or .xls). Note that an Excel file whose name starts with "~$" is a temporary file created by Excel when you open a workbook. Do not upload the temporary file that cannot be read in the grading system.
   b. If you **show the right process** to solve each question, you can expect to have partial points, although you provide wrong answers. Without showing your process in Excel, you will not get full credit even though you provided a correct answer.
   c. **Ungraded practice problems/solutions** will be provided to help students understand homework problems.
   d. **HW resubmission**: Students who submit an HW solution "**on time**" have a resubmission opportunity to enhance their understanding of excel practices. To receive potential bonus points properly, students should follow **the resubmission policy** on the Canvas page.
2. **Quiz (20%):** Students' learning will be also assessed by quizzes (due: **11:59pm, Sunday**). Quizzes will be open book. Two attempts at each weekly quiz, where you receive the highest grade of the attempts made. ***Late submissions will be penalized by 10% for any full or partial day late up to 3 days following the due date.*** Submissions will be disabled after the third day.

Exams (50% of grade): There are two exams – Midterm (20%) and Final (30%) using ProctorU. The exams are multiple choice and true/false format. Exams are open book including e-books and excel. Exams are timed, so it is important to prepare properly and early. ***Late submissions will not be accepted***.

Grading Philosophy:
I understand that the process of receiving grades can inhibit the learning process. I endeavor to create a safe learning environment. As part of that environment, you have several opportunities to maintain a high grade in the course, including:

- Two attempts at each chapter quiz, where you receive the highest grade of the attempts made.
- All quizzes and exams are open book. However, it will be timed so it is important to prepare for them properly and in a timely manner.
- Bonus opportunities throughout semester.
- Timely feedback on assignments.
- Course schedule in the Syllabus may be altered during the semester due to unforeseen circumstances.

Grading Scale: Students will be evaluated based on the grading scale below.

A	90% - 100%
B	80% - 89.9%
C	70% - 79.9%
D	60% - 69.9%
F	$\leq 59.9\%$

Note: Final grades will not be rounded or adjusted based on proximity to these cut-points.

Course Policies:
Artificial Intelligence Policy
For GENB 2300, Business Statistics, AI is permitted only for specific assignments or situations, and appropriate acknowledgment is required.
For Class Discussion Posts, you/we may leverage AI tools to support your learning and allow you to explore how AI tools can be used, or better understand their benefits and limitations. Learning how to use AI is an emerging skill, and we will work through the limitations of these evolving systems together. However, AI will be limited to assignments where AI is a critical component of the learning activity, in this case Warm-Up Discussions (with acknowledgement). I will always indicate when and where the use of AI tools for this course is appropriate or allowed. AI is not to be used to solve homework assignments, or the Mid-Term or Final Exams.

Class Meeting Attendance
Attendance at all online class sessions is expected for the accomplishment of course objectives. The instructor recognizes that learners may have special issues and responsibilities that may impact attendance, however regular attendance is expected. If absences occur, the learner is responsible for contacting the facilitator in advance so that adjustments can be made to the instructional activities planned for a specific session. The learner is also responsible for all work that is missed due to the absence from any class meeting, or portion thereof.

Late Work
Late chapter assignment submissions will be accepted up to 3 days beyond the due date listed in the Syllabus and in the Canvas module. A late work penalty of 10 points per day applies to late submissions, as noted earlier in the Syllabus. Submissions of chapter assignments and quizzes will not be accepted, and Canvas submission will be disabled, after the 3rd day following the specified due date.
No credit will be given for late exam submissions unless the learner's provider and/or UT Tyler's system prevents the student from submitting a discussion post, assignment, quiz, or exam. The student is responsible for contacting the instructor, providing evidence of the outage and submitting any missed work within 24 hours of resolution of any system outage.

University Policies and Information Highlights*:

Final Exam Policy

Final examinations are administered as scheduled. If unusual circumstances require that special arrangements be made for an individual student or class, the dean of the appropriate college, after consultation with the faculty member involved, may authorize an exception to the schedule. Faculty members are required to maintain student final examination papers for a minimum of three months following the examination date.

Academic Honesty and Academic Misconduct

The UT Tyler community comes together to pledge that "Honor and integrity will not allow me to lie, cheat, or steal, nor to accept the actions of those who do." Therefore, we enforce the Student Conduct and Discipline policy (Links to an external site.) in the Student Manual Of Operating Procedures (Section 8).

COVID Guidance

Information for Classrooms and Laboratories: It is important to take the necessary precautions to ensure a healthy and successful year. UT Tyler continues to urge you to protect yourselves against the flu, COVID and any new threats that may be developing. Be diligent about preventive measures such as washing hands, covering sneezes/coughs, social distancing, and vaccinations, which have proven to be successful in slowing the spread of viruses. Encourage those who don't feel well to stay home, and if they show symptoms, ask them to get tested for the flu or COVID. Self-isolation is important to reduce exposure (CDC quarantine/isolation guidelines (Links to an external site.)).Please work with your faculty members to maintain coursework and please consult existing campus resources (Links to an external site.) for support.

*You can find the details of university policies about the following areas in the "University Policies and Information" page on the class Canvas site.
- Withdrawing from Class
- Incomplete Grade Policy
- Grade Appeal Policy:
- Disability/Accessibility Services
- Military Affiliated Students
- FERPA
- Absence for Official University Events or Activities
- Absence for Religious Holidays
- Campus Carry