

**GENB 2300 – Business Statistics**  
**Online, Fall 2024**

**Instructor:** Stephen Taylor, MBA

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(Canvas is preferred contact method)

**Cell Phone:** 214-455-8398 (call or text if you need a quick response)

**Office Hours:** Tuesday and Thursday: 11:30 am to 2:00 pm. If no one has joined the call by 11:40 I will end the call. Meetings can also be set up by appointment via Canvas message.

**Required Materials:**

- **Textbook:** Camm, J. D., Cochran, J. J., Fry, M. J., & Ohlmann, J. W. (2020). Business analytics (4<sup>th</sup> 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.
- **Virtual Desktop:** Some students have trouble getting the Excel Data Analysis module loaded. If this happens to you, or you have another computer issue, a virtual desktop with Excel is available from the UT Tyler Library by logging in at <https://one.uttyler.edu/> from any computer. Sign in to your cloud account or email a copy of the homework file to yourself and open the file.
- **Cloud Storage:** I highly recommend that you store all of your electronic academic files in the Cloud using the free OneDrive account available through UT Tyler, or a personal cloud service such as iCloud. This way, if you have a life emergency you can access the university virtual desktop from any computer, log in to Canvas and your cloud storage, and successfully finish the class. If you are experiencing issues that prevent you from completing your work, please reach out to the instructor and we will work on a solution together.
- **Webcam and microphone access for ProctorU utilization during exams:** For additional information, please visit [www.uttyler.edu/digital-learning/proctoru-resources/](http://www.uttyler.edu/digital-learning/proctoru-resources/).

**Course Description:**

This course covers 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.

**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. It is recommended that you confirm your submission is correct in Canvas after you upload it. The possible points for each assignment are as follows:

**Grade Composition:**

<b>Weekly Activity (5%)</b>	
Warm-up Discussion	5%
<b>Chapter Assignment (45%)</b>	
Excel Homework	25%
Quiz	20%
<b>Exams (50%)</b>	
Midterm	20%
Final	30%
<b>Course Total</b>	<b>100%</b>

**Weekly Activity (5% of grade):**

1. **Warm-up Discussion (5%):** Students should provide their own thoughts on the weekly discussion topic on Canvas **by 11:59pm, every Saturday**. Students should make a grammatically correct post containing at least four sentences, which will be evaluated on each post's uniqueness, critical thinking, and contribution. *Late submissions will be penalized by 10% for any full or partial day late.*

**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.*

1. **Excel Homework (25%):** Homework problems will be assigned to help students mainly learn quantitative tools and understand business analytics deeply (due: **11:59pm, Saturday**).
  - 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 as it 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 a 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, Saturday**). Quizzes

will be open book. Two attempts at each weekly quiz, where you receive the highest grade of the attempts made.

**Exams (50% of grade):** There will be two exams – Midterm (20%) and Final (30%), using the ProctorU Extension. The exams will be in multiple choice and true/false formats. Your exams will be open book including e-books and excel sheets. However, it will be timed so it is important to prepare for them properly and in a timely manner. *Late submissions will not be accepted.*

**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	≤ 59.9%

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

**Course Outline/Major Topics Studied:**

Week	Dates	Readings	Key Topics *Bonus Point Opportunity	Note
1	8/26~9/1	Ch1 Introduction	Introduction	Ch1 Quiz Due (8/31)
2	9/2~9/8	Ch2 Descriptive Statistics I	Types of Data, Modifying Data, Creating and Analyzing Distribution	No HW or Quiz
3	9/9~9/15	Ch2 Descriptive Statistics II	Measures of Location, Variability, Association between two variables	Ch 2 HW/Quiz Due (9/14)
4	9/16~9/22	Ch3 Data Visualization	Table Design Principles, PivotTables, Scatter and Line Charts	Ch 3 HW/Quiz Due (9/21)
5	9/23~9/29	Ch4 Probability I	Basic and Conditional Probability, Discrete/Continuous Variables	Ch 4 Pt 1 HW Due (9/28)
6	9/30~10/6	Ch4 Probability II	Normal Probability Distribution	Ch 4 Pt 2 HW/Quiz Due (10/5)
7	10/7~10/13	<b>STUDY WEEK 1</b>	*You can resubmit previous Excel HWs of Ch 2, 3 (Due: 10/13)	
8	10/14~10/20	<b>Midterm Exam</b>	Ch 1, 2, 3, 4	Midterm Due (10/19)
9	10/21~10/27	Ch6 Statistical Inference I	Sample and Population, Point Estimation *you can resubmit previous Ch4 Excel HW (Due: 10/21)	Ch 6 HW I due (10/26)
10	10/28~11/3	Ch6 Statistical Inference II	Sampling Distribution, Interval Estimation	Ch 6 HW II Due (11/2)
11	11/4~11/10	Ch6 Statistical Inference III	Hypothesis Testing	Ch 6 HW III/Quiz Due (11/9)
12	11/11~11/17	Ch7 Linear Regression I	Simple Linear Regression Model, Least Squares Method	Ch 7 HW I Due (11/16)

13	11/18-11/24	Ch7 Linear Regression II	Assessing the Fit of the Regression Model, Inference and Regression	Ch7 HW II/Quiz Due (11/23)
TG	11/25-12/1	<b>Thanksgiving</b>	Happy Thanksgiving!	
14	12/2-12/8	<b>STUDY WEEK 2</b>	*you can resubmit previous Excel HWs of Ch 6, 7 (Due: 12/8)	
15	12/9-12/13	<b>Final Exam</b>	Ch 2, 4, 6, 7 *Three bonus points assignments (Due: 12/13)	

**Disclaimer:** Course schedule is subject to change and you will be responsible for abiding by any such changes. Your instructor will notify you of any changes.

### **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.

### **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 facilitator 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**

No credit will be given for late assignments 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