

## Statistics and Business Decision Making

Brazos High School

2024-2025 Course Syllabus

Teacher	Ms. Randice Nelson
Email Address	rnelson@brazosisd.net
BHS Website	<a href="https://www.brazosisd.net/">https://www.brazosisd.net/</a>

### Current Lesson Plans with TEKS

**Supplies:** Binder of any size, dividers, notebook paper

**Grading:** Your grade will be based on classroom work, class participation, quizzes, tests, and special projects.

Your grade will be determined by the following:		
Daily work, participation, quizzes	60%	At least 12 grades per six weeks
Tests/Projects	40%	2 per six weeks

- All work will be done in class unless prior arrangements have been made.
- All work will be done in class unless prior arrangements have been made. There will be times when work outside of class may be required for

projects. Work should be turned in by the due date for full credit, 10-point deduction when late.

- All make-up work should be done before or after school. If you know you will be missing several days of class, please make prior arrangements to pick up your assignments.

**ATTITUDES AND WORK HABITS:** Your general attitude toward work assignments, suggestions from the instructor, and relationships with other students in the classroom are indications of your ability to be a success on the job or adapt to the work of business. It is essential to have a healthy, cheerful attitude and responsible work habits during all class sessions.

**Absences and Tardies:** It is difficult to support your learning when you are not present in class. Course subjects can only be effectively learned when you are in class on a regular basis. However, I definitely understand that illness and such can keep you away from school. Unexcused absences and tardies will be handled in accordance with established BHS policies.

<b>EXPECTATIONS:</b>	<b>Additional district rules/expectations:</b>
1) Complete daily classwork assignments	<b>No technology devices used unless authorized.</b>
2) Participate in discussions and ask questions	<b>Cell phones in backpacks during lessons.</b>
3) Participate constructively as a team member (must be relevant)	<b>Abide by the school technology rules.</b>

4) Refrain from talking while others are speaking	<b>Keep your work area clean.</b>
5) Problem solve and accept challenges	<b>DO NOT bring candy, drinks, or food into the classroom.</b>
6) Respect others opinions	<b>Only use the internet when directed to do so.</b>

**Be COUGAR ready! Be COUGAR proud!**

## Course Description

Statistics and Business Decision Making is an introduction to statistics and the application of statistics to business decision making. You will use statistics to make business decisions. You will determine the appropriateness of methods used to collect data to ensure conclusions are valid.

## Objectives

**1st Six - Weeks Unit 1: Professional Standards and Communication** You will begin the course by learning and discussing appropriate verbal, nonverbal, and digital communication, professional standards, ethical and legal issues, customer service, and business etiquette. You will demonstrate your understanding of appropriate communication, ethical and legal decision-making, business etiquette, and customer service by resolving complaints and building customer relationships as you participate in classroom activities, discussions, and/or in workplace vignettes/scenarios. You will continue to develop and demonstrate appropriate communication and business etiquette skills throughout the course.

**1st Six - Unit 2: Statistics in Business** You will summarize and evaluate how statistics are used in business areas such as accounting, economics, finance, management, and marketing. You will learn, demonstrate, and explain your understanding of problem-solving models and how to apply your mathematical understanding and skills to the use of statistics. You will be given multiple opportunities to learn and demonstrate your understanding of the ethical and responsible use of statistics in classroom activities, discussions, projects, and/or presentations.

**2nd Six - Unit 3: Statistical Analysis Software** You will examine and explain the software associated with statistical analysis. You will examine and assess statistical information and collect, collate, organize, and analyze quantitative data. You will create and/or use spreadsheets, graphs, diagrams, text, and/or other representations to explain and describe how financial information and using statistical analysis assists in business decision-making.

**3rd Six - Unit 4: Defining, Collecting, and Understanding Data** You will learn, discuss, and demonstrate defining and collecting data, and create and/or use graphs, diagrams, text, and/or other representations to explain and understand variables, populations and samples, sampling methods, and survey error types. You will also discuss descriptive measures as well as demonstrate how to organize and visualize categorical data and numerical data. You will be given multiple opportunities to learn and discuss these topics and to demonstrate your understanding in classroom activities, discussions, projects, and/or presentations.

**3rd Six - Unit 5: Probability** You will learn, demonstrate, and explain your understanding of problem-solving models and how to apply your mathematical understanding and skills to the use of probability. You will define and explain terminology associated with probability and statistics and perform and analyze assigned calculations. You will be given multiple opportunities to learn and demonstrate your understanding of the use of probability in classroom activities, discussions, projects, and/or presentations.

**4th Six - Unit 6: Sampling and Hypothesis Testing** You will learn, demonstrate, and explain your understanding of problem-solving models and how to apply your mathematical understanding and skills to the use of sampling distribution, sampling distribution of the mean, and the central limit theorem. You will define and explain terminology associated with the use and construction of confidence intervals, hypothesis testing, and analysis of variance, and perform and analyze assigned calculations. You will be given multiple opportunities to learn and demonstrate your understanding of a chi-square test and the use of nonparametric tests in classroom activities, discussions, projects, and/or presentations.

**4th Six - Unit 7: Linear Regression, Analysis, and Forecasting** You will learn, demonstrate, and explain your understanding of simple linear regression, multivariable regression, time series analysis, and forecasting. You will define and explain the terminology as well as the mathematical ideas and processes associated with the use of regression models and components and perform and analyze assigned calculations. You will be given multiple opportunities to learn and demonstrate your understanding of the equations, models, and components in classroom activities, discussions, projects, and/or presentations.

**5th Six - Unit 8: Risk Management: Strategies, Techniques, and Careers** You will learn, demonstrate, and explain your understanding of risk management terminology, strategies, and techniques as well as the relationship between risk management and operations. You will be given multiple opportunities to demonstrate your understanding of risk management in classroom activities, discussions, projects, and/or presentations. You will explore, identify, and discuss various careers in risk management as well as career-related licensing and certification programs and educational requirements. You will use diagrams, text, and/or other representations to compare and contrast the fundamentals of risk management, including reasons and benefits, and demonstrate your understanding of the role of ethics as well as responsibilities in risk management in classroom activities, discussions, and/or workplace/occupational task scenarios.

**6th Six - Unit 9: Postsecondary Planning** You will use appropriate technology and/or other materials/activities to research and identify potential career interests and

opportunities. You will research, identify, and use graphs, diagrams, text, and/or other representations to compare beginning and expected future compensation/earnings of potential careers and the costs and requirements associated with postsecondary education. You will create your postsecondary plans after identifying and comparing current educational, military, and job opportunities. Plans will include resumes and cover letters, educational requirements, relevant application and testing deadlines, and a description of projected living expenses. If time permits, you will research and briefly discuss opportunities and benefits offered via participation in CTSO and/or other extracurricular student activities as a course culminating activity.