BU250/OM250 Syllabus
Business Department

Course Information:

BU250/OM250 — Dr. Karen Baehler
3 Credit Hours — Spring 2023

Instructor Information:

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Preferred Method of Communication: Please e-mail any questions or concerns.

Textbook Information: Moore, D., Notz, W. & Fligner, M. (2018). *The Basic Practice of Statistics, 8th ed.* Macmillan. ISBN 978-1-319-04257-8

COURSE DESCRIPTION

BU250 Business Statistics 3 credits This course studies the application of statistical methods to decision making in business. Topics include sampling distributions and their properties, hypothesis testing, correlation, linear and multivariate regression analysis, linear optimization routines, chi-square test procedures, and statistical quality control. Emphasis will be placed on understanding statistical concepts, experimental design, and interpretation of statistical results. Students will be introduced to computer-based tools used in the analysis of data. Prerequisites: MA110, MA 139 or higher math course, or ACT math score of at least 23. (Fall & as announced)

PERFORMANCE OUTCOMES

Course Objectives	KNW, SKL or VAL	Activities	Assessments
Demonstrate essential familiarity with the measurement of data	KNW, SKL	Reading, Lecture and Practical Application	Quizzes and Examinations

and the vocabulary of probability statistics.			
Calculate and interpret measures of statistical inference and apply these measures to decision making in a management context.	KNW, SKL	Reading, Lecture and Practical Application	Quizzes, Examination and Homework
Demonstrate an understanding and ability to interpret the results of statistical analysis.	KNW, VAL	Reading, Lecture and Practical Application	Homework and Assignments

GRADING POLICY/ASSESSMENT METHODS

Letter Grade	Numerical Value	Point Value
A	100 – 93	4.00
A minus	92– 90	3.70
B plus	89 – 87	3.30
B	86 – 83	3.00
B minus	82 – 80	2.70
C plus	79 – 77	2.30
C	76 – 73	2.00
C minus	72 – 70	1.70
D plus	69 – 67	1.30
D	66 – 63	1.00
D minus	62 – 60	0.70
F	≤ 59	≤ 0.35

ACTIVITY/ASSIGNMENT	Points
Statistics Project	250
Weekly Quizzes (19 x 10 points each)	190
Worksheet	60
Totals Points for Class	500

CLASSROOM BEHAVIOR POLICIES

The online learning environment includes technology, information, and people. Students should demonstrate professionalism and integrity in regard to all components of the learning environment. Given that students and instructors may be from anywhere in the world, learners should consider differences in time zones if telephone conversation is ever required.

Treating Other Students with Respect

Students should avoid inflammatory or offensive comments—which undermine the objective of a positive learning experience—in communicating with their peers. Most students want to get the most from their online course, which means that they expect their peers' cooperation on collaborative assignments and thoughtful participation in discussion forums.

Treating Instructors with Respect

Students can show respect to instructors by reading all announcements in a timely manner, communicating in a timely fashion about problems (technological or other) that will cause work to be turned in late, and following directions.

Respect for All Parties Who Collaborate with the Institution to Create Learning Experiences

Service, observation, and clinical practice are important components of Sterling College Online programs. The organizations and employers who cooperate with Sterling College to help students succeed do so out of kindness and social responsibility; they are not *required* to participate in Sterling College Online learning experiences. Sterling College values the cooperation of all parties who help students learn and grow by providing observatory and hands-on experience. Students should likewise respect the contributions of such parties.

Respecting Laws Regarding Technology and Information

Students may not use or reproduce any technology or course component for financial purposes or for the purpose of defaming the institution or individuals. Online learners should use technology for the sole purpose of learning and sharing course-related information with others in the learning community.

ATTENDANCE POLICIES
Weekly participation is recorded in the "Attendance" section of the course.

Examples of participation:

- discussion board participation, not including introductory forums
- assignment submissions other than basic logins/views

Please note: any student not participating regularly may be administratively withdrawn from the course.

LATE WORK
Specific calendar dates for assignments will be posted online. Late work is not accepted. Please email me if you have questions about due dates or are experiencing technical difficulties.

COMMUNICATION
Please be respectful of instructors and be sensitive to differences in time zones. Students should not call instructors at unconventional times. Instructors' time zones and available times for contact are published in each course *at the instructor's discretion*. Typically, the primary method of contact is through direct email or postings in the online learning management system. In addition, students can show respect to instructors by reading all announcements in a timely manner, checking the "Announcements" section of the course each time they log in;

communicating in a timely fashion about problems (technological or other) that will cause work to be turned in late; and following directions.
The organizations and employers who cooperate with Sterling College to help students succeed do so out of kindness and a commitment to social responsibility; they are not *required* to participate in Sterling College Online learning experiences. Sterling College thus appreciates and values the cooperation of all parties who help students learn and grow by providing observatory and hands-on experience. Students should also recognize and respect the contributions of such parties.

COURSE OUTLINE/DAILY SCHEDULE

Approximate Date	***Read & Review***
Week 1	**Unit 1:** Chapter 1: Picturing Distributions with Graphs Chapter 1 Quiz How Old is Your Ride? Worksheet
Week 2	Chapter 2: Describing Distributions with Numbers Chapter 2 Quiz Chapter 3: Normal Distributions Chapter 3 Quiz
Week 3	Chapter 4: Scatterplots and Correlations Chapter 4 Quiz Chapter 5: Regression Chapter 5 Quiz
Week 4	**Unit 2** Chapter 8: Producing Data Samples Chapter 8 Quiz Chapter 9: Producing Data Experiments Chapter 8 & 9 Vocabulary Quiz
Week 5	Chapter 12: Introducing Probability Chapter 12 Quiz
Week 6	Chapter 13: General Rules of Probability Chapter 13 Quiz
Week 7	**Unit 3** Chapter 15: Sampling Distribution Chapter 15 Quiz Chapter 16: Confidence Intervals Chapter 16 Quiz

Week 8	Chapter 17: Tests of Significance Chapter 17 Quiz Chapter 18: Inference in Practice Chapter 18 Quiz
Spring Break	**March 13-19**
Week 9	**Unit 4** Chapter 20: Inference about a Population Mean Chapter 20 Quiz Chapter 21: Comparing Two Means Chapter 21 Quiz
Week 10	Chapter 22: Inferences About a Population Proportion Chapter 22 Quiz
Week 11	Chapter 23: Comparing Two Proportions Chapter 23 Quiz
Week 12	Chapter 25: Two Categories Variables: The Chi Square Test Chapter 25 Quiz
Week 13	Work Week for Statistics Project Due April 23. Responses to videos due Wednesday April 26
Week 14	Project and Responses Due End of Semester

More Details are available on Canvas

ACADEMIC INTEGRITY

Sterling College faculty and students form an academic community committed to the Biblical principles of justice and honesty and to the core values of faith, calling, learning, integrity, service and community. With this in mind, the policy in the current Academic Catalog will be followed for this class.

FINAL EXAM POLICY

Given the unique format of online, asynchronous courses, the Sterling College Final Exam Policy does not apply to this course.

ACADEMIC SUPPORT OFFICE
The Academic Support Office strives to challenge students who come from all types of academic journeys through academic mentoring with directors and SC peers. Mentoring topics include time management, study skills, testing anxiety, and more. Students struggling with certain subjects may find aid through the on-campus tutoring program (scheduled by appointment only) and 24/7 professional help via the online Tutor.com platform accessible through Canvas. The office facilitates CLEP, Accuplacer, and other SC exam proctoring. Students may contact the Academic Support Office at academicsupport@sterling.edu, or call 620-278-4463, to schedule an appointment.

STATEMENT OF NONDISCRIMINATION
Sterling College does not discriminate on the basis of race, color, national origin, sex, disability or age. The policy in the current Academic Catalog will be followed for this class.

DISABILITY ACCOMMODATIONS
Any student with a disability who may need classroom accommodations in this course should contact the Academic Support Office, located in Mabee Library. Students may email academicsupport@sterling.edu, call 620-278-4463, or stop by the office. The office serves students with a wide range of documented physical and learning disabilities.

TITLE IX STATEMENT
Sterling College is committed to providing a learning, working and living environment that promotes personal integrity, civility, and mutual respect in an environment free of sexual misconduct and discrimination. Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. Harassment is no acceptable. If you or someone you know has been harassed or assaulted, you can find the appropriate resources here:

- *Sterling College, Title IX Coordinator, call 620-204-0025 or email titleIX@sterling.edu*
- *https://www.sterling.edu/title-ix*
- *Sterling College, Counseling Services, (620) 278-4297*
- *Sterling College, Chaplain, (620) 278-4341*
- *City of Sterling, Police Department (620) 278-2100*
- *24-hour Crisis Hotline (800) 701-3630*
- *National Suicide Prevention Hotline, 800-273-8255, or 988*
- *Rice County Hospital (620) 257-5173*