Identification	Subject	**BSA 250 Business Statistics - 3KU credits/6ECTS**
	Department	School of Economics and Management
	Program	Undergraduate
	Term	Spring 2023
	Instructor	Farid Abbaszada
	E-mail	farid.abbaszada@khazar.org
	Classroom/hours	
	Language	English
Prerequisites	**MATH 219** Business Mathematics	
Compulsory/ Elective	Compulsory	
Textbooks and course materials	1) Paul Newbold, William L.Carlson and Betty M.Thorne Statistics for Business and Economics, Global Edition 2019 2) Paul Newbold, William L.Carlson and Betty M.Thorne \`\`**Statistics for Business and Economics''**, 8th edition, 2013. (NW) 3) Levine, Krehbiel, Berenson, \`\`**Business Statistics: A First Course**\`\`, 5th edition, 2010. **Supplementary book** **Statistics for Managers Using Microsoft Excel** by D. Levine, D.Stephan, T.Krehbiel, M.Berenson, 6th edition, 2011.	
Course objective and outline	The first course in the core statistics sequence cover topics in Statistics. The main purpose of these courses is to explain how we can apply statistic to real businesses. The tools learned in these courses are essential for applying. Focus on these courses will be on basic principles, including among other things: describing data with graphs, testing hypothesis, random variables, probability, conditional probability, probability densities and distributions, characteristic functions, test statistic formulation and distribution theory, statistical inference, and basic regression. Emphasis will be placed on applied problem solving using the tools learned in the class	
Learning Outcomes	After this course: • students will be able to calculate descriptive and numerical measures • students will be able to calculate probabilities based on both sample and population datasets in order to make initial inferences about population parameters. • students will acquire skills to test population parameters by using Hypothesis testing based on sample observations. • students will obtain insights about the involvement of statistical methods in real business and economic applications.	

Teaching Methods	**Case analysis/Exercises/Assignments**	X
	Group discussion	X
	Lecture	X

Evaluation	**Methods**	**Percentage (%)**
	Midterm Exam	30
	Attendance	5
	Activity	5
	Quizzes (2)	20
	Final Exam	40
	Total	100

Policy	- **Attendance Policy** 5 % of final grade will be given for class attendance. Students should attend all classes. The proof of reason for unavoidable absence has to be provided by student. In this case, the absence will not be resulted with grade subtraction. Students should come to the classes on time. Late arrival more than 15 minutes will be resulted as absence on the attendance sheet. In case of late arrival, student has to inform Instructor in advance. **Important Note: If the student miss 25% of all classes during the semester, he or she will not be allowed to participate in examination.** - **Class participation in this course:** 5% of the final grade will be given for class participation. It is required from students to contribute to the class discussion and actively participate in team works. The quality of contribution will be the main factor not the quantity of contribution. **Quiz**: Each quiz is 10% of final grade and will take 30 minutes and their time will not be

announced beforehand. Quizzes will consist of open-ended questions and will evaluate according to that.

Academic Dishonesty: Students are expected to conduct themselves in a professional manner. Academic dishonesty such as plagiarism and cheating will not be tolerated. Therefore, students are expected to be honest and ethical in their academic work. Cases of academic dishonesty will be immediately reported to the Director's office for disciplinary action.

Office Hours: The instructor will be available to consult with students regarding class related questions regularly by appointment. Meetings with students outside office hours should be scheduled in advance by sending an e-mail to the instructor.

Tentative Schedule

Week		Topics	Textbook/Chapters
1		Introduction to Statistics. Basic definitions and terminologies.	Chapter 1 (NW)
2		Using Graphs to Describe Data	Chapter 1 (NW)
3		Using Numerical Measures to Describe Data (Measures of central Tendency)	Chapter 2 (NW)
4		Measures of variablity, Weighted Mean, Measures of Grouped data	Chapter 2 (NW)
5		Elements of Chance: Probability Methods	Chapter 3 (NW)
6		Conditional Probability and Bayes Theorem	Chapter 3 (NW)
7		Discrete Probability Distributions, **Quiz 1**	Chapter 4 (NW)
8		Jointly Distributed Discrete Random Variables	Chapter 4 (NW)
9		**Midterm Exam**	
10		Continuous Probability Distribution	Chapter 5 (NW)
11		Sampling Distribution of Sample Means	Chapter 6 (NW)
12		Sampling Distribution of Sample Proportion	Chapter 6 (NW)
13		Confidence Interval Estimation of Unknown Population Mean	Chapter 7 (NW)
14		Confidence Interval Estimation of Unknown Population Mean when population variance in unknown. **Quiz 2**	Chapter 7 (NW)
15		Hypothesis Tests of Single Population.	Chapter 9 (NW)
		Final Exam	