LINCOLN UNIVERSITY
BA 115 – Statistics
Course Syllabus
Spring 2022

Instructor: Professor Dan Sevall

Lecture Schedule: Thursday, 12:30pm – 3:15pm

Credits: 3 units /45 lecture hours

Level: Developed (D)

Office Hours: Thursdays 11:30 to 12:30

Email: dsevall@lincolnuca.edu

Textbooks:
Levine, David, and Szabat, Katherine. *Business Statistics: A First Course, 7th Edition*. **(2017) Prentice Hall.** ISBN-13: 978-0321979018.

Earlier editions of this course text are acceptable for students to use.

Last Revision: January 3, 2022

Catalog Description

This course is designed for both the business major and for the non-business students without previous knowledge of statistics. Emphasis is on descriptive statistics and inferential statistics with relevant applications to solving problems, hypothesis testing and decision-making. Important statistical models and distributions will be discussed. *Prerequisite: MATH 10 or MATH 15.*

COURSE LEARNING OUTCOMES[1]

	Course Learning Outcome	Program LO	Institutional LO	Assessment activities
1	Students are expected to learn basic concepts and techniques regarding business statistics and probability. The emphasis of the course will be on the application of statistical techniques	PLO 1	ILO 1a, ILO 2a, ILO 3a	Midterm and Final Exams
2	Students are expected to develop logic, application and interpretation of the most common statistical techniques used in business and social science.	PLO 2	ILO 1a, ILO 6a	Midterm Exam and Final Exam
3	Confidently communicate using business statistics and mathematics terminology	PLO 3		Case Analyses
4	Be able to choose an appropriate statistical analysis for the type of data to be analyzed.	PLO 4	ILO 1a, ILO 2a, ILO 5a	Final Exam

INSTRUCTIONAL METHODS

This is a direct classroom instruction course.

The emphasis will be on learning by solving problems. Every student is welcome to participate in intensive classroom activities. Reading and problem solving assignments will be given throughout the course. Homework will be assigned and solved during sections. Suring lectures, students will learn principles and concepts covered in the text as well as in various sources on relevant topics. The teaching assistant will conduct the laboratory session. He will help students to review the material as well as work on cases relevant to the topics covered by the homework. There may be class discussions and group presentations by students on the project assignments during class.

Assignments and projects require students to actively use resources of the library. Detailed guide to business resources of the library as well as the description of Lincoln University approach to information literacy are available at the Center for Teaching and Learning website (ctl.lincolnuca.edu).

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[1] Detailed description of learning outcomes and information about the assessment procedure are available at the Center for Teaching and Learning website (ctl.lincolnuca.edu).

Academic Honesty, Plagiarism Policies and Procedures:

Lincoln University intends to be a community of educators and learners with shared values. Accordingly, Lincoln expects the highest standards of honesty and integrity from all members of the academic community.

What is considered academic dishonesty? It is generally taking credit for work which is not your own or attempting to receive credit or improve a grade through fraudulent or deceptive means. Examples include taking information from or providing information to another student, or plagiarism (the intentionally or knowingly representing the word or ideas of another as one's own in any academic exercise).

What is Plagiarism? Whenever you quote from, make reference to, or use ideas attributable to others in your writing, you must identify these sources in citations or bibliography, or both. If you do not, deliberately or accidentally, you have committed plagiarism. Plagiarism, defined as the act of stealing or using as one's own the ideas of another, is not permitted in college or university work or in any published writing. "Plagiarism may take the form of repeating another's sentences as your own, adopting a particular apt phrase as your own, paraphrasing someone else's argument as though it were your own." (Modern Language Association Handbook, New York: MLA, 1977, P.4). The sanctions for plagiarism range from reprimands and counseling to expulsion from the University. The appropriate sanction is determined by the University Committee on Academic Dishonesty. The University faculty may use internet-based services to identify those portions of student written assignments that might not meet the full standards of academic integrity as defined in this statement.

Course Requirements

1. Textbook Assignments

Students should read all assignments and be prepared to discuss the material covered. Assigned problems should be worked out in advance as a basis for review in class. Students should pinpoint major concepts and procedures in each chapter, understand their meaning and application, and raise questions in class on areas of complexity or ambiguity. Study in teams is recommended both to accelerate the learning process and to obtain feedback on individual interpretations. Homework may be collected for purposes of extra credit.

2. Projects/Cases

Through the completion of selected end of chapter cases, each student will show the application of concepts covered in the course, such as study of annual reports, ratio and other analysis including comparison with other companies, and bond and stock valuation. Students are encouraged to work in teams, and each team will select a topic. Grades will be based on content, innovative ideas, and presentation.

Instructors may require students to make an oral presentation in class based on their paper.

3. <u>Midterm and Final Exam</u>

There will be a midterm and final exam. The purpose of these tests is to evaluate the student's understanding of the concepts and how to apply them. This includes learning how to perform the calculations and use the techniques that are an integral part of a course in finance. The tests also serve to let the student know how he or she is doing and what areas need further emphasis.

Evaluation Criteria

Midterm Exam	25%
Attendance and Class Participation	15%
Case Analyses	20%
Final	40%

Total	100%

Letter grades will be given based on the following scaling:
A 90 - 100
B 80 - 89
C 70 - 79
D 60 - 69
F 0 - 59

Class Sessions 1 and 2	Chapter 1 (Introduction and Data Collection)
	Chapter 2 (Presenting Data in Tables and Charts)
Class Sessions 3 and 4	Chapter 3 (Numerical Descriptive Measures) Chapter 4 (Bayes Theorem)
Class Sessions 5 and 6	Chapter 5 (Discrete Probability Functions)
Class Sessions 7 and 8	Chapter 6 (Introduction to Normal Distribution) and Midterm
Class Sessions 9 and 10	Chapter 7 (Sampling and Sampling Distribution)
Class Sessions 11 and 12	Chapter 8 (Confidence Interval Estimation)
Class Sessions 13 and 14	Chapter 9 (Hypothesis Testing)
Time Permitting	Chapter 10 (ANOVA)
	Chapter 11 (Chi-Square Distributions)
	Review and Final Exam