

Revised January 8, 2009

**LINCOLN UNIVERSITY**  
**Department of Business and Economics**  
Spring 2009

**COURSE:** BA 45 - STATISTICS - 3 units  
**INSTRUCTOR:** Prof. Leonid Romanyuk  
**OFFICE HOURS:** MW 11:50-12:25, room 402, e-mail: [romanyuk@lincolnu.edu](mailto:romanyuk@lincolnu.edu)  
**TEXT:** Essentials of Business Statistics, 2nd edition, by Bruce Bowerman, Richard O'Connell, J. Burdeane Orris, McGraw-Hill/Irwin, 2008, ISBN-10: 0073319880 or 0072977485.  
**REQUIRED TOOLS:** A scientific or graphical calculator and Excel spreadsheets  
**OPTIONAL:** Student Solutions Manual to accompany Essentials of Business Statistics, by Bruce Bowerman, Richard O'Connell, J. Burdeane Orris, McGraw-Hill/Irwin, 2008, ISBN-10: 0073208566  
**OPTIONAL:** Publisher's Web resources at <http://www.mhhe.com/bowermaness2e>

**CATALOG DESCRIPTION:**

This course is designed for both the business major and for the non-business student 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 such as normal, binomial and Poisson exponential distributions will be discussed. (3 units) Prerequisite: Math. 10

**LEARNING OBJECTIVES:**

To introduce students to the basic concepts and techniques of business statistics and probability, and to teach students how to apply them. To introduce students to problem solving and mathematical modeling and to build a solid foundation in the principles of statistical thinking using case study and example driven discussions of all basic business statistics topics.

**INSTRUCTIONAL METHODS:**

Lecture method is used in combination with the practical use of the Internet and business software tools to solve problems. The emphasis will be on learning by doing. Every student must participate in an intensive classroom activity. Reading and problem solving assignments will be made throughout the course.

**TOPICAL OUTLINE OF THE COURSE:** weekly schedule of topics is attached

**REQUIREMENTS:**

All students are required to attend the class. Continuous assessment is emphasized. Written or oral quizzes will be given every week. Students must complete all assignments and take all quizzes, mid-term exam and final exam ON THE DATES DUE. Plagiarism will result in the grade "F" and a report to the administration. *No computers or cellular phones will be allowed to be used during tests.*

**GRADING:**

Classroom activities and quizzes	every week	20%
Assignments and Projects	every week	30%
Mid-term exam	10 <sup>th</sup> week	20%
Final exam	18 <sup>th</sup> week	30%

Less than 60% total is an "F"; 75% total is "C+". Other grades will be calculated "on the curve" from the scores above.

## SPRING 2009 SCHEDULE OF TOPICS AND REQUIRED READING

*Read every chapter on the topic to be discussed in class before you come to class.*

Week #	Topics	Chapter #
1 1/12/09	An Introduction to Business Statistics	1
2 1/19/09	Martin Luther King Jr. Birthday (Holiday)	
3 1/26/09	Descriptive Statistics	2
4 2/02/09	Probability	3
5 2/09/09	Discrete Random Variables	4
6 2/16/09	President's Day (Holiday)	
7 2/23/09	Continuous Random Variables	5
8 3/02/09	Sampling Distributions	6
9 3/09/09	<b>Review</b>	<b>1 - 6</b>
10 3/16/09	<b>MIDTERM EXAM</b>	<b>1 - 6</b>
11 3/23/09	Confidence Intervals	7
12 3/30/09	Hypotheses Testing	8
13 4/06/09	Statistical Inferences Based on Two Samples	9
14 4/13/09	Experimental Design and Analysis of Variance Chi-Square Tests	10 11
15 4/20/09	Simple Linear Regression Analysis	12
16 4/27/09	Multiple Regression and Model Building	13
17 5/04/09	<b>Review</b>	<b>1 - 13</b>
18 5/11/09	<b>COMPREHENSIVE FINAL EXAM</b>	<b>1 - 13</b>