Course Title: Statistics Instructor: Prof. Serge Ruiz

**Course No:** BA 45 **Phone:** 949-232-3323

Units: 3 units (= 45 lecture hours) E-mail: sruiz@lincolnuca.edu

Class Hours: Mondays and Wednesdays Office Hours: After class or upon

12:30 pm – 3:15 pm request

**Semester:** Summer 2014 **Office Number:** Room 402

# **REQUIRED MATERIALS**

**Textbook**: Essentials of Business Statistics, by Bruce Bowerman, Richard O'Connell, J.

Burdeane Orris, McGraw-Hill/Irwin, 4th Edition, 2011, ISBN-10: 007340182X

**Calculator:** no phone will be admitted during the tests. Each one must have his/her own.

Website: elearning.lincolnuca.edu

### **COURSE 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 and distributions will be discussed. (3 units) Prerequisite: MATH 10 or MATH 15

#### **LEARNING OBJECTIVES**

The students will learn the basic concepts and techniques of business statistics and probability, and how to apply them. The students will be introduced to problem solving and statistical modeling and will 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 a calculator, business and statistical software, and the Internet resources to solve application problems. The emphasis will be on learning by doing. Every student must participate in an intensive classroom activity. Reading, writing, and problem solving assignments will be made weekly throughout the course.

## OTHER 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. Talking in class, using cell phones, coming late, leaving the room at times other than at break time is not allowed. Plagiarism/cheating will result in the grade "F" and a report to the administration.

# **ASSIGNMENTS & QUIZZES**

Most assignments will be from the textbook. Each assignment is due at the beginning of the following class. You can return your assignments electronically if you desire. Quizzes will take place at the beginning of the course, after collecting assignments and answering questions. Quizzes are designed to last 20 minutes and are based on the material in the assignment. The schedule will be found on the class' website.

#### **TESTING**

Classroom activities	every week	10%
Assignments	every week	10%
Quizzes	as scheduled	10%
Mid-term exam	as scheduled	30%
Final exam	as scheduled	40%

There will be no make-up for a missed participation in a classroom activity. No make-up exams will be given unless you have the instructor's <u>prior</u> approval obtained in person <u>before</u> the exam date, with the exception of an extreme emergency. Late assignments will get no credit or reduced credit. *Students will not be allowed to use computers or cellular phones during tests.* 

#### **GRADING**

Grades will be determined according to the following percentages awarded on completed work:

100-93	92-90	89-87	86-83	82-80	79-77	76-73	72-70	69-67	66-60	59-0
A	A-	B+	В	B-	C+	С	C-	D+	D	F

### **OTHER COMMENTS**

- Please participate. You will be asked to go to the board to solve exercises.
- To avoid distracting noise in class, cellular phones must be turned off or the ringing mode silenced.
- Questions and comments during the class are welcome. Do not hesitate to ask questions do not leave anything unclear for you.

## **SCHEDULE OF TOPICS**

Please read every chapter of the textbook before you come to class

Session	Date	Topics	Chapters
1	06/09	Descriptive Statistics: Tabular and Graphical Methods	1, 2
2	06/11	Descriptive Statistics: Numerical Methods	3
3	06/16	Probability	4
4	06/18	Discrete Random Variables	5
5	06/23	Continuous Random Variables. Properties of the Mean and the Variance of a Random Variable and the Covariance	6
6	06/25	Quiz 1 : practice midterm	1-6
7	06/30	Midterm Exam	1-6
8	07/02	Sampling and Sampling Distributions	7
9	07/07	z-based Confidence Intervals	8
10	07/09	t-based Confidence Intervals	8
11	07/14	Hypotheses Testing	9
12	07/16	Simple Linear Regression Analysis	13
13	07/21	Quiz 2 : practice final	1-9, 13
14	07/23	Final Exam	1-9, 13

## **MODIFICATION OF THE SYLLABUS**

This syllabus was updated on April 1, 2014. The instructor reserves the right to modify this syllabus at any time during the semester. An announcement of any changes will be made in the classroom.