# LINCOLN UNIVERSITY Fall 2014

### Tuesdays and Thursdays 3:30 pm – 5:15 pm

COURSE:	<b>BA 45 – STATISTICS -</b> 3 units (30 h of lectures and 30 h of sections)
INSTRUCTOR: ASSISTANT:	Dr. Mikhail Brodsky, president@lincolnuca.edu, 510-208-2803 Olmas Isakov, oisakov@lincolnucasf.edu, 415-583-5158
<b>OFFICE HOURS:</b>	Tue, 3:00 pm – 3:30 pm (instructor in room 203) Thu, 5:15 pm – 5:45 pm (assistant in room 405)
TEXT:	"The Practice of Statistics for Business and Economics" by David Moore, George McCabe, Layth Alwan, Bruce Craig, and William Duckworth. Third edition, W. H. Freeman and Co. ISBN: 978-1-4292-3281-4.
TOOLS:	Students will be required to use a simple calculator during lectures and a laptop with Excel software is recommended for sections.

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

#### **LEARNING OBJECTIVES:**

This class is designed for those who want to know how to extract meaningful information from numbers, or how to make interpretation of data from newspapers, or how to gamble on a roulette table, or how to play on stock market, or just how to choose a bride or groom. Business decision-making will be really easy after it. The class does not require knowledge of any complicated mathematical subject, but requires common sense and practical logic. The students will learn the basic concepts and techniques of business statistics and probability, and learn how to apply them. The students will also create mathematical models and 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, special charts and Excel software to answer application questions in statistics. 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 made throughout the course. Home works will be given and solved during sections. There will be two different sessions of the class. The first session is presentation of material (lectures) by the instructor. 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 second session. He will help students to review the material as well as work on cases relevant to the topic(s). There may be class discussions and group presentations by students on the project assignments during the sections.

#### **REQUIREMENTS:**

All students are required to attend the class. Continuous assessment is emphasized. Students must complete all assignments and take mid-term exam and final exam ON THE DATES DUE. The tests are open book but plagiarism from other students will result in the grade "F".

No computers or cellular phones will be allowed to use during lectures or tests.

GRADING:		
Home works	every week at sections	10%
Classroom attendance	every week: lectures and sections	10%
Quizzes	three quizzes at sections	10%
Mid-term exam	October 7	30%
Final exam	December 9	40%

Grades will be calculated "on the curve" to be at least C (63%) average for the class. A is 91% and above of total, A- is 86-90%, B+ is 81-85%, B is 76-80%, B- is 71-75%, C+ is 66-70%, C is 61-65%, C- is 56-60%, D+ is 51-55%, D is 46-50%, F is 45% and below.

# This schedule may be changed during the semester if necessary.

# FALL 2013 SCHEDULE OF TOPICS

Week	Topics	Chapters
1 (8/26, 28)	Introduction to Statistics, Variables, Scales	Ch. 1.1
2 (9/2, 4)	Continue Variables and Descriptive Statistics	Ch. 1.2
3 (9/9, 11)	Continue Descriptive Statistics, Quiz 1	Ch. 1.3
4 (9/16, 18)	Correlation	Ch. 2.1-2
5 (9/23, 25)	Correlation and Regression	Ch. 2.4-5
6 (9/30,10/2)	Practice Midterm and Solutions	Ch. 1, 2
7 (10/7, 9)	Midterm Exam (10/8) and Solutions	Ch. 1, 2
8 (10/14, 16)	Box Model and Sampling	Ch. 3
9 (10/21, 23)	Probability and Random Variables	Ch. 4.1-3
10 (10/28, 30)	Continue Probability, Quiz 2	Ch.5.1-3
11 (11/4, 6)	Sampling and Confidence Intervals	Ch. 4.4, 6.1
12 (11/11, 13)	Interference for Proportions	Ch. 8.1-2
13 (11/18, 20)	Test of Significance, Quiz 3	Ch. 6.2-3
14 (12/2, 4)	Practice Final, Solutions and Discussions	Ch. 3-6, 8
15 (12/9, 11)	Final Exam (12/10) and Solutions	Ch. 3-6, 8