# WILLIAM PATERSON UNIVERSITY COLLEGE OF BUSINESS

# DEPARTMENT OF ECONOMICS, FINANCE, AND GLOBAL BUSINESS COURSE OUTLINE BUSINESS STATISTICS I

WINTER 2013-2014

**I. PROFESSOR:** Dr. Alex Panayides

**OFFICE:** V3022

**OFFICE HOURS:** N/A; all instruction will be conducted online

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**II. COURSE:** Business Statistics – ECON 2100

**III. PREREQUISITES:** MATH 1400 or MATH 1170

### IV. DESCRIPTION:

An introduction to statistics as applied to business and economics. Topics covered include collection and presentation of data, measures of central tendency and dispersion, probability, probability distributions, sampling methods, sampling distributions, and estimation.

# V. OBJECTIVES:

- (1) To acquire knowledge concerning the presentation of data
- (2) To understand the basic concepts of probability
- (3) To be able to use probability to understand events in economics and business
- (4) To understand the importance of sampling and statistical inference

VI. TEXT: D. Lind, W. Marchal, S. Wathen, <u>Statistical Techniques in</u> Business and Economics, 15th edition (Irwin, McGraw-Hill 2012).

#### VII. TENTATIVE CLASS OUTLINE:

- 1. Introduction to Statistics Chapter 1
- 2. Frequency Tables, Frequency Distributions and Graphing Chapter 2

- 3. Numerical Measures to Describe Data Chapter 3
- 4. Displaying and Exploring Data Chapter 4

Exam 1

5. Probability Chapter 5

6. Discrete Probability Distributions Chapter 6

7. Continuous Probability Distributions Chapter 7

Exam 2

8. Sampling Chapter 8

9. Estimation Chapter 9

Exam 3

# VIII. TEACHING METHODS:

The course will be conducted in the following format: I will post notes for each chapter that will describe the main features of the chapter, examples, references to additional readings, and practice problems. In addition to the notes I will post the relevant power point presentations. There will be class discussion of some topics using the Discussion Board in Blackboard. You are required to access the Blackboard pages daily to check for announcements and other postings such as assignments.

I will regularly assign problems from the textbook. You will submit your solutions by attaching them to an e-mail to me either on a word or PDF format only (panayidesa@wpunj.edu). You will use only your WPU e-mail account for correspondence. Assignments are due at 11:59 p.m. Eastern Time on the day specified on the assignment. No late submissions will be accepted. These problem assignments will count for 25% of your grade. After collecting your solutions I will post the correct solutions online for everybody to see and correct the mistakes made if any. I will not return your submitted assignments. You will receive the full 25% as long as all assignments are submitted. These problems will be a very good indication of the exam problems which count for the remaining 75% of your

grade. This is an applied course; so, the only way to learn the material is by doing a lot of problems. Primarily I will assign the even numbered problems from the text. All the solutions to the odd numbered problems are in the back of your textbook and they are an excellent references to your homework problems. Please note that there will be *no* extra credit assignments!

I strongly encourage you to keep up with the course since the material that is usually covered over a whole semester is compressed into three weeks.

# IX. ACADEMIC INTEGRITY:

Cheating in its various forms will be severely punished. The *minimum* penalty is a grade of zero on the assignment in question, but it can go up to expulsion from the university. If you have not done so yet, please familiarize yourself with the "Academic Integrity Policy" (available online at <a href="http://ww2.wpunj.edu/adminsrv/hr/FacultyHandBook/AcademicIntegrityPolicy.htm">http://ww2.wpunj.edu/adminsrv/hr/FacultyHandBook/AcademicIntegrityPolicy.htm</a>). All parts of that Policy are relevant and important, but for the online setting of the class, I especially would like to stress sections II.B. (on plagiarism) and II.C. (on collusion).

# X. GRADING AND EVALUATION:

Students are evaluated for final grades on the following:

Three exams (25% each) 75% Homework assignments 25%