ψ *STATISTICAL METHODS IN BEHAVIORAL SCIENCES*

Course Title: Statistical Methods in Behavioral Sciences - **CRN 10811**
Course Number: Psychology 214
Lecture: Monday/Wednesday 11:50 a.m.–1:15 p.m. in Room 2734
Lab: Monday 1:30 p.m.-3:35 p.m. in Room 2610
Prerequisites: PSY 101 & Math 091 or 090 with grade C or better
Semester Units: 4
Instructor: Krista L. Byrd
Office: Room 807 B
Office Hours: Monday - Thursday 10:30 a.m.-11:30 a.m.;
Wednesday 3:30 p.m. - 4:30 p.m.
Phone: (760) 355-6335
E-mail: krista.byrd@imperial.edu
Required Text: **Customized Version:** Gravetter, F.J. & Wallnau, L.B. (2014). *Statistics for Behavioral Sciences: The* Essentials, 8th Edition, Wadsworth/Cengage Learning. **Bundled with Aplia.**

You will need a scientific calculator.

Course Description:

This course is designed to introduce you to the main quantitative methods for analyzing and interpreting research data in Psychology and other Behavioral Sciences. Topics to be covered include Frequency Distributions, Central Tendency, Variability, Z-Scores & Standard Distribution, Probability, Hypothesis Testing, the *t* Statistic, ANOVA, Correlations, and Chi-Square.

Course Objectives:

The objectives of this course are: **1**) To critically think about, conduct, and interpret the main statistical procedures used in Psychology and other Behavioral Sciences; and **2**) To leave this course with a basic understanding of how these various statistical methods can be applied in everyday real-world settings.

Course Format:

This course will consist of a combination of lectures, class discussion, assigned readings, lab assignments and performance on exams.

Course Requirements:

Attendance and Class Participation. You are expected to attend class and stay for the whole period. You will be expected to demonstrate an understanding of the assigned reading by actively participating in class discussions. If you miss a class, it is your responsibility to get class notes from a fellow student. If you are going to miss a class, please call me **before** class to let me know.

You may be dropped from class if you are absent consecutively for the equivalent of one week of instruction, but **DO NOT** count on the instructor dropping you. If you want to drop the class, it is your responsibility. **Please check your I.V.C. e-mail and/or Blackboard before class in case the instructor will not be attending class that day.**

Lab Assignments. Every week there will be lab assignments that correspond to the chapters in the book we cover during lecture. Lab assignments will be assigned from the Aplia Program and SPSS. You will be analyzing and interpreting data and then writing up the results. You will be working on these assignments during lab hours, as well as for homework. Points will vary based on the number and difficulty of the assignments.

Homework. There will be questions, from the end of each chapter, assigned out of your textbook for homework. They will correspond with the lab assignments, especially for SPSS. Points will vary based on the number and difficulty of the homework questions assigned.

Student Learning Outcome. In order to demonstrate your comprehension of statistical methods, you will be required to analyze, interpret, and apply data using correlations. (ILO1, ILO2, ILO3).

Exams. Four (4) exams will be given. Exams will be multiple choice and calculations based on the textbook, lectures, lab data and computer output. No make-up exams will be given unless you have called me **PRIOR** to the exam and let me know you will not be able to take the exam. If you contact me prior to the exam, you will have one week to make-up the exam. Each exam will be worth 100 points. **Please bring a #2 pencil, paper and a scantron to each examination**.

Grading System:

90-100% = A	Exams	4@	100 pts.	400 pts.
80-89% = B	Aplia Assignments			1,000 - 1,600 pts.
70-79% = C	SPSS Assignments			325 - 650 pts.
60-69% = D	Homework			375 - 500 pts.
0-59% = F	Participation			25 pts.

TOTAL: 2,125 – 3,175 pts.

Special Accommodation:

Should a student enrolled in the course require a special accommodation due to a disability in order to complete the requirements of the course, please advise the instructor immediately or contact the Disabled Student Programs and Services at (760) 355-6312.

Academic Dishonesty:

Please read and understand this section fully. Academic dishonesty (cheating) of any type will not be tolerated in my classroom. If a student is caught committing any type of academic dishonesty he or she will be given a 0 for the assignment/exam and will be reported to Student Affairs for further handling of the matter. In addition, unless you have made prior arrangements with the instructor, leaving during the class period or while watching a movie will be counted as an absence. If you get up and leave during class, please do not return. Coming in and out is disruptive to the other students as well as myself. Also, no cell phones should be answered during class or examinations.

TENTATIVE COURSE SCHEDULE

Date of Lecture	Lecture	Reading Assignment	Date of Lab	Lab Assignment
08/19/13	Introduction to Class		8/19/13	Introduction to Aplia & SPSS
08/21/13-08/26/13	Introduction to Statistics	Chapter 1	8/26/13	Aplia & SPSS Assignments Chapter 1
09/02/13	**LABOR DAY**	**NO CLASS**	**09/02/13**	**NO LAB – LABOR DAY HOLIDAY**
08/28/13-09/04/13	Frequency Distributions	Chapter 2		
09/09/13-09/11/13	Measures of Central Tendency	Chapter 3	09/09/13	Aplia & SPSS Assignments Chapter 2
09/16/13-09/18/13	Measures of Variability	Chapter 4	09/16/13	Aplia & SPSS Assignments Chapter 3
09/23/13	**EXAM#1**		09/23/13	Aplia & SPSS Assignments Chapter 4
09/25/13-09/30/13	Z-Scores & Standard Distributions	Chapter 5	09/30/13	Aplia & SPSS Assignments Chapter 5
10/02/13-10/07/13	Probability & Distribution of Sample Means	Chapters 6 & 7	10/07/13	Aplia & SPSS Assignments Chapters 6 & 7
10/09/13-10/14/13	Introduction to Hypothesis Testing	Chapter 8	10/14/13	Aplia & SPSS Assignments Chapter 8
10/16/13	**EXAM#2**			
10/21/13-10/23/13	Correlation	Chapter 14	10/21/13	Make-Up Assignments
10/28/13-10/30/13	Introduction to the *t* Statistic	Chapter 9	10/28/13	Aplia & SPSS Assignments Chapter 14
11/04/13-11/06/13	The *t* Test for Two Independent Samples & Two Related Samples	Chapters 10 & 11	11/04/13	Aplia & SPSS Assignments Chapter 9
11/11/13	**VETERAN'S DAY**	**NO CLASS**	11/11/13	**NO LAB-VETERANS DAY HOLIDAY**
11/13/13	**EXAM#3**			
11/18/13-11/20/13	ANOVA	Chapter 12	11/18/13	Aplia & SPSS Assignments Chapters 10 & 11
11/25/13-11/27/13	Repeated Measures & Two Factor ANOVA	Chapter 13	11/25/13	Aplia & SPSS Assignments Chapter12
12/02/13	The Chi-Square Statistic	Chapter 15	12/02/13	Aplia & SPSS Assignments Chapters 13 & 15
12/04/13	**FINAL**			

This instructor reserves the right to make announced modifications to this course outline.