Basic Course Information

Semester	**Spring, 2014**	Instructor Name	**Krista L. Byrd**
Course Title & #	**Statistical Methods in Behavioral Sciences – PSY 214**	Email	**krista.byrd@imperial.edu**
CRN #	**20470**	Webpage (optional)	
Room	**304B (Lecture); 2610 (Lab)**	Office	**807B**
Class Dates	**01/22/2014 – 05/14/14**	Office Hours	**Monday – 10:30-11:30 a.m.;** **Tuesday - 3:00- 3:30 p.m.;** **Wednesday- 10:30-11:30 a.m.** **& 4:30-5:30 p.m.** **Thursday - 3:00-3:30 p.m.**
Class Days	**Monday & Wednesday-Lecture** **Monday-Lab**	Office Phone #	**(760) 355-6335**
Class Times	**11:50-1:15 p.m. – Lecture** **1:30-3:30 p.m. – Lab**	Office contact if student will be out or emergency	**(760) 355-6144**
Units	**4.00**		

Course Description

Quantitative methods in behavioral sciences are considered including: measures of central tendency and variability; graphic methods and percentages; linear correlation and regression; application of normal probability curves; and introducing statistical inferential measures including "t" tests, one and two-way analysis of variance, and chi-square. The data analysis will also involve statistical and graphical analysis and interpretation of behavioral science data using computer technology such as SPSS. (CSU, UC)

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. understand, analyze and apply data using correlations. (ILO1, ILO2, ILO3)
2. understand, analyze and apply data using "t" tests. (ILO1, ILO2, ILO3)
3. understand, analyze and apply data using analysis of variance. (ILO1, ILO2, ILO3)
4. understand, analyze and apply data using chi-square. (ILO1, ILO2, ILO3)

Course Objectives

Upon satisfactory completion of the course, students will be able to:

1. determine the appropriateness and values of different measures of central tendency and variance, including standard scores and percentiles; and graphical representations of each.
2. compute the coefficients of Spearman's and of Pearson's correlations and levels of significance; regression equations; and graphical representations of each.
3. use probability theory to discuss aspects of the normal distribution including its use in statistical reasoning.
4. compute and interpret "t" scores and their significance using data from a minimum of two samples.
5. compute and interpret "F" ratios and significance levels from one-way and two-way analysis of variance.

6. compute and interpret results from non-parametric tests including chi-square and Mann-Whitney.
7. successfully load, interpret, and print output data sheets and graphs from statistical software such as SPSS and Excel.

Textbooks & Other Resources or Links

Customized Version: Gravetter, F. and Wallnau, L.B. (2014). *Statistics for the Behavioral Sciences: The Essentials, (8th ed*.), Wadsworth/Cengage. Bundled with Aplia.

A scientific calculator is required to complete the requirements of this course.

Course Requirements and Instructional Methods

This course will consist of a combination of lectures, assigned readings, classroom work on formulas and calculations, lab assignments and performance on homework and exams.

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, out of lab for homework. Points will vary based on the number and difficulty of the assignments. **Aplia sets a deadline for every Sunday at 11:00 p.m. for each of the weekly lab assignments and does not accept late 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. **Late homework will only be accepted one class period after the due date.**

Exams. Three (3) 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 scientific calculator, a #2 pencil, paper and a scantron to each examination**.

Course Grading Based on Course Objectives

90-100% = A	Exams	3@ 100 pts.	300 pts.
80-89% = B	Aplia Assignments		500-1,000 pts.
70-79% = C	SPSS Assignments		250-500 pts.
60-69% = D	Homework		250 - 500 pts.
0-59% = F	Participation		25 pts.

TOTAL: 1,325 – 2,325 pts.

Attendance

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

Classroom Etiquette

- Electronic Devices: Cell phones must be turned off and put away during class unless otherwise directed by the instructor. Laptops or tablets will be allowed for note taking purposes only. **The instructor reserves the right to limit the use of technology in the classroom in the event the technology becomes disruptive to the class learning environment.**
- Food and Drink are prohibited in all classrooms.   Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- Children in the classroom: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

Academic Honesty

- Plagiarism is to take and present as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to correctly 'cite a source', you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment or using or attempting to use materials, or assisting others in using materials, or assisting others in using materials, which are prohibited or inappropriate in the context of the academic assignment in question. Anyone caught cheating will receive a zero (0) on the exam or assignment and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to the following:
  o plagiarism
  o copying or attempting to copy from others during an examination or on an assignment;
  o communicating test information with another person during an examination;
  o allowing others to do an assignment or portion of an assignment
  o use of a commercial term paper service

Additional Help

- <u>Blackboard</u> support center: http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8543
- <u>Learning Labs:</u> There are several 'labs' on campus to assist you through the use of computers, tutors, or a combination. Please consult your college map for the Math Lab, Reading & Writing Lab, and Learning Services (library). Please speak to the instructor about labs unique to your specific program
- <u>Library Services:</u> There is more to our library than just books. You have access to tutors in the learning center, study rooms for small groups, and online access to a wealth of resources.

Disabled Student Programs and Services (DSPS)

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6312 if you feel you need to be evaluated for educational accommodations.

Student Counseling and Health Services

Students have counseling and health services available, provided by the pre-paid Student Health Fee. We now also have a fulltime mental health counselor. For information see http://www.imperial.edu/students/student-health-center/. The IVC Student Health Center is located in the Health Science building in Room 2109, telephone 760-355-6310.

Student Rights and Responsibilities

Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities please refer to the IVC General Catalog available online at http://www.imperial.edu/index.php?option=com_docman&task=doc_download&gid=4516&Itemid=762

Information Literacy

Imperial Valley College is dedicated to help students skillfully discover, evaluate, and use information from all sources. Students can access tutorials at http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/

Anticipated Class Schedule / Calendar

Date of Lecture	Lecture	Reading Assignment	Date of Lab	Lab Assignment
01/22/14	Introduction to Class			
01/27/14-01/29/14	Introduction to Statistics	Chapter 1	01/27/14	Introduction to Aplia & SPSS Aplia & SPSS for Chapter 1
02/03/14-02/05/14	Frequency Distributions	Chapter 2	02/03/14	Aplia & SPSS Assignments for Chapter 2
02/10/14-02/12/14	Measures of Central Tendency	Chapter 3	02/10/14	Aplia & SPSS Assignments for Chapter 3

Date of Lecture	Lecture	Reading Assignment	Date of Lab	Lab Assignment
02/17/14	**President's Day Holiday – No Class**		**02/17/14**	**No Lab**
02/19/14-02/24/14	Measures of Variability	Chapter 4	02/24/14	Aplia & SPSS Assignments for Chapter 4
02/26/14	**EXAM#1**	Chapters 1-4		
03/03/14-03/05/14	Z-Scores & Standard Distributions	Chapter 5	03/03/14	Aplia & SPSS Assignments for Chapter 5
03/10/14-03/12/14	Probability & Distribution of Sample Means	Chapters 6 & 7	03/10/14	Aplia & SPSS Assignments for Chapters 6 & 7
03/17/14-03/19/14	Introduction to Hypothesis Testing	Chapter 8	03/17/14	Aplia & SPSS Assignments for Chapter 8
03/24/14	**Review for Exam**		03/24/14	Review for Exam/Make-Up Work
03/26/14	**EXAM#2**	Chapters 5-8		
03/31/14-04/02/14	Introduction to the *t* Statistic	Chapter 9	03/31/14	Aplia & SPSS Assignments for Chapter 9
04/07/14-04/09/14	The *t* Test for Two Independent Samples & Two Related Samples	Chapters 10 & 11	04/07/14	Aplia & SPSS Assignments for Chapters 10 & 11
04/14/14-04/16/14	ANOVA	Chapter 11	04/14/14	Aplia & SPSS Assignments for Chapter 12
04/28/14-04/30/14	Correlation	Chapter 14	04/28/14	Aplia & SPSS Assignments for Chapter 14
05/05/14	Repeated Measures & Two Factor ANOVA	Chapter 13	05/05/14	Aplia & SPSS Assignments for Chapters 13 & 15
05/07/14	The Chi-Square Statistic	Chapter 15		
05/12/14-05/14/14	**FINAL**		05/12/14	SPSS Final

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