



IMPERIAL VALLEY COLLEGE

Basic Course Information

Semester:	Fall 2021	Instructor Name:	Robert Wyatt
Course Title & #:	PSY 214 – Statistical Methods	Email:	Robert.wyatt@imperial.edu
CRN #:	10982	Webpage:	http://www.imperial.edu
Classroom:	Online	Office #:	Imperial Valley College
Class Dates:	08/30/21 – 12/11/21	Office Hours:	M-F 10:00-11:00am
Class Days:	Online	Office Phone #:	760-355-6491
Class Times:	Online	Emergency:	760-554-6083
Units:	4.0	Class Format:	Online

Course Description

Quantitative methods in behavioral sciences are considered including: scales of measurement, measures of central tendency and variability; probability and sampling distributions, visual displays of data (graphical methods), frequency tables and percentages; introduction to hypothesis testing, statistical inference and measures of association using correlation and linear regression; analysis of variance, chi-square and t-tests. Emphasis is placed on using software for data analysis such as SPSS and Excel and interpreting statistical findings from such analysis. Examples will be used from disciplines including business, social sciences, psychology, sociology, life sciences, health sciences, education and related areas. (CSU, UC)

Course Prerequisite(s) and/or Corequisite(s)

Prerequisite: PSY 101 and MATH 091 or MATH 098 with a grade of “C” or better or appropriate placement as defined by AB705.

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.
2. Understand, analyze and apply data using "t" tests.
3. Understand, analyze and apply data using analysis of variance.
4. Understand, analyze and apply data using chi-square.

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

Gravetter, Frederick & Wallnau, Larry B. (2013). Essentials of Statistics for the Behavioral Sciences, 10th Ed - Wadsworth/Cengage Learning: Belmont, CA. ISBN-13: 978-1-133-95657-0; ISBN-10: 1-133-95657-2

Course Requirements and Instructional Methods

This class is strictly online via CANVAS.

Modules Section: You will find all the information. I have broken it up by chapters. In the section, you will see Power-point slides, videos, and possibly additional information to help you understand the material.

Tests: You will be given a test for every 3 chapters. (50 points each)

Lab Work: The primary focus of the lab is to provide a time for you to develop and work on the problems and equations associated with every other chapters. You are to complete the EVEN NUMBER problems for every other chapter and turn them in by the end of the assigned week. If you are having difficulty, you need to reach out to me so I can assist you. If you do not turn them in, you will not get credit. There are no make-ups for the lab work. You have to indicate how you got your answer. I will not accept just the answer.

Course Grading Based on Course Objectives

ASSIGNMENT	TOTAL POINTS
Tests	200
Lab Work	100
TOTAL	300
GRADE	POINTS
A	270 - 300
B	269 - 240
C	239 - 210
D	209 - 180
F	179 - 0

Other Course Information



COMPLETE YOUR OWN COURSEWORK.

- When you register for an online class and log-in to Canvas, you do so with the understanding that you will produce your own work, take your own exams, and will do so without the assistance of others (unless directed by the instructor).

Examples of Academic Dishonesty that can occur in an online environment:

- Copying from others on a quiz, test, examination, or assignment
- Allowing someone else to copy your answers on a quiz, test, exam, or assignment
- Having someone else take an exam or quiz for you
- Conferring with others during a test or quiz (if the instructor didn't explicitly say it was a group project, then he/she expects you to do the work without conferring with others)

IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.

Anticipated Class Schedule/Calendar

WEEK	CHAPTER	ASSIGNMENT	DUE DATE
08/30 – 09/10	Introduction – Welcome to Class		
08/30 – 09/10	Chapter 1: Introduction to Statistics		
08/30 – 09/10	Chapter 2: Frequency Distribution	Lab: Numbers 2,4,6,8,10	September 12
09/13 – 09/17	Chapter 3: Central Tendency	Test 1: Chapters 1 -3	September 19
09/20 – 09/24	Chapter 4: Variability		
09/27 – 10/01	Chapter 5: Z-Scores	Lab: Numbers 2,4,6,8,10	October 03
10/04 – 10/08	Chapter 6: Probability	Test 2: Chapters 4 - 6	October 10
10/11 – 10/15	Chapter 7: Probability and Samples		
10/18 – 10/22	Chapter 8: Hypothesis Testing	Lab: Numbers 2,4,6,8,10	October 24
10/25 – 10/29	Chapter 9: T-Statistics	Test 3: Chapters 7 - 9	October 31
11/01 – 11/05	Chapter 10: T-Test for 2 Independent Samples		
11/08 – 11/19	Chapter 11: T-Test for 2 Related Samples	Lab: Numbers 2,4,6,8,10	November 21
11/22 – 11/26	No Class: Fall Recess: Thanksgiving Holiday		
11/29 – 12/03	Chapter 12: Analysis of Variance	Test 4: Chapters 10 - 12	December 05
	Chapter 13: Two-Factor of Analysis of Variance		
12/06 – 12/10	Chapter 14: Correlations & Regression	Lab: Numbers 2,4,6,8,10	December 10
	Chapter 15: Chi-Square Statistics	Test 5: Chapters 13 - 15	December 10

****Highlighted means that 2 chapters will be covered that week!!!****

*****Subject to change without prior notice*****