San José State University
Justice Studies Department
Fall 2022
JS 15 Statistics in Justice Studies

Contact Information
Instructor: Yue Yuan Ph.D.
Office Location: Online office hours by Zoom appointment only
Email: wilson.yuan@sjsu.edu
Classroom: SJSU Canvas

Course Format

This course adopts an online classroom delivery format. You will need the access to the internet, computer, and video/word processing software, in order for students to participate in the classroom activities. See University Policy F13-2 at http://www.sjsu.edu/senate/docs/F13-2.pdf for more details.

MYSJSU Messaging

You are responsible for regularly checking with the messaging system through MySJSU. Course materials including syllabus, notes, assignment, and journal articles can be found on the Canvas website.

Course Description

Catalog Description: Introduction to measures of central tendency, variation, correlation and regression, probability, estimation and hypothesis testing as used in Justice Studies. GE Area: B4 Prerequisite: Math Enrollment Category M-I or M-II, or completion of a GE Area B4 course with a grade of C- or better.

Course Goals

The primary goal of this course is to introduce you to statistical techniques commonly used by social scientists. It is useful to think of these techniques as tools that can be used to answer questions about the social world. For example, social scientists have relied on statistics to answer questions such as "Has the level of violent crime in American cities increased over the past decade?" or "Do juvenile smokers commit more delinquent acts than nonsmokers?" During this course, you will learn some of these statistical techniques and how to use them to answer questions commonly confronted by social scientists. Similarly, you will also learn how to interpret and make sense of statistical information reported in research journal articles, newspapers and magazines.

Student Learning Objectives are as follows:

Upon completion of this course, students should be able to:

1. Using mathematical methods to solve quantitative problems. Throughout the course, we will use basic mathematical operations to solve some statistical problems.

2. Using mathematics to solve problems in criminal justice and criminology.

3. Arriving at conclusions based upon the numerical and graphical data. We will be going over a few different ways to present data, highlighting the benefits and important aspects of each.

4. Applying mathematical concepts in one or more areas. After covering foundational statistical concepts, this course will focus on probability and inferential statistics. These are essential to understanding how statistics are used in academic writing and social scientific findings that support the fields that are covered in many future courses students will complete.

6. Writing requirements: In clear and concise language, students will be using their understanding of statistical concepts to interpret results, both in assignments and when responding to short answer/and or essay questions on quizzes and the Final Exam.

Required E-book:

Statistics for Criminology and Criminal Justice (Fifth Edition) by Ronet D. Bachman, Raymond Paternoster and Theodore H. Wilson ISBN: 9781544375700

Other Readings

- Articles on Canvas

Course Requirements and Assignments

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of *forty-five hours for each unit of credit*, including preparing for class, participating in course activities, completing assignments, and so on. **Late homework, quizzes and exams will not be accepted**.

Requirements: You are required to read all books, book chapters, and articles in advance. Your grade is based on homework, midterm, and final exam.

Midterm and Final Examination: Midterm is scheduled for Friday, October 14 from 5:15 to 7:30 PM and Final exam is scheduled for Thursday, December 8 from 5:15 to 7:30 PM

Grading Information

You will not be able to drop the class after the official DROP Day (http://www.sjsu.edu/winter/academic/calendar/) except when you have medical emergency with your doctor's note. There will be no make-ups for your missed exams. There will be only one exception to this polity. Those students who provide written notice in advance who must miss class for university business will have special tests arranged usually before the scheduled

test. A final grade of incomplete (I) will be reserved for emergency situation only with your doctor's note.

Final Grade (total points possible: 400 points)

The point totals break down as follows:	
Weekly Homework	150 points
Discussion	50 points
Midterm	100 points
Final exam	100 points
Total	400 points

Total Points Possible: 400 points (There is no possibility of extra credit)

A plus = 100-96%	A = 95-93%	A minus = 92-90%
B plus = 89-86%	B = 85-83%	B minus = 82-80%
C plus = 79-76%	C = 75-73%	C minus = 72-70%
D plus = 69-66%	D = 65-63%	D minus = 62-60%
F = 59-0% 0-179		

Justice Studies Department Reading and Writing Philosophy

The Department of Justice Studies is committed to scholarly excellence. Therefore, the Department promotes academic, critical, and creative engagement with language (i.e., reading and writing) throughout its curriculum. A sustained and intensive exploration of language prepares students to think critically and to act meaningfully in interrelated areas of their lives– personal, professional, economic, social, political, ethical, and cultural. Graduates of the Department of Justice Studies leave San José State University prepared to enter a range of careers and for advanced study in a variety of fields; they are prepared to more effectively identify and ameliorate injustice in their personal, professional and civic lives. Indeed, the impact of literacy is evident not only within the span of a specific course, semester, or academic program but also over the span of a lifetime.

University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/"

JS 15
Statistics in Justice Studies
Course Schedule

Topics and Readings

Chapter 1. The Importance of Statistics in the Criminological Sciences or Why Do I have to Learn This Stuff?

Chapter 2. Levels of Measurement and Aggregation
Chapter 3. Understanding Data Distributions: Tabular and Graphical Techniques

Chapter 4. Measures of Central Tendency

Chapter 5. Measures of Dispersion
Chapter 6. Probability, Probability Distributions, and an Introduction to Inferential Testing

Midterm

Chapter 7. Point Estimation and Confidence Intervals
Chapter 8. From Estimation to Statistical Tests: Hypothesis Testing for One Population Mean and Proportion

Chapter 9. Testing Hypotheses With Categorical Data
Chapter 10. Hypothesis Tests Involving Two Population Means or Proportions
Chapter 11. Hypothesis Tests Involving Three or More Population Means: Analysis of Variance

Chapter 12. Bivariate Correlation and Regression

Final Exam