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

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.

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

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