San José State University Department of Justice Studies

Course Goals and Learning Objectives

The student learning and content goals for Area B4 courses include the following (1-6):

- 1. *Using mathematical methods to solve quantitative problems*. Throughout the course, we will use basic mathematical operations to solve some statistical problems. Others will be solved by use of statistical software, putting to work these mathematical operations in more complex ways. We will use statistical formulas for both application and understanding. Students will need to be familiar with basic algebraic operations. Test items will typically be multiple choice, short answer, and essay, including word problems.
- 2. *Using mathematics to solve real life problems*. Practice problems and tests questions will be, in most cases, derived from everyday life and publically available data. However, some data will also be made up, but designed to reflect current events and issues.
- 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.
- 5. *Incorporating issues of diversity.* There will be a number of examples and test and homework questions that will deal with issues of diversity in a number of forms that include race, ethnicity, national origin, religion, sex, physical abilities, age, marital status, citizenship, economic levels, and/or sexual orientation.
- 6. Writing requirements (minimum 500 words): 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. Writing skills are important. A portion of how short answer and essay questions are evaluated will include the thoroughness and clarity of responses.

Texts/Readings

Textbook

Salkind (2016). Statistics for People Who Think They Hate Statistics, 6th Edition. SAGE Publications. ISBN-10: 1506333834 (Optional)

Required Software	
SPSS is required for much of the homework assignments.	Fortunately, a student license is

Quizzes (24 Points)

There will be three Quizzes. Each Quiz will cover the past topics since the previous Quiz. <u>Formulas will not be provided.</u> Each Quiz is worth 8 points.

Final

University Policies:

The Office of Graduate and Undergraduate Programs maintains university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. You may find all syllabus related University Policies and resources information listed on GUP's Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/ In addition, I wanted to emphasize the following for this course:

Student Technology Resources

Computer labs for student use are available in the <u>Academic Success Center</u> at http://www.sjsu.edu/at/asc/ located on the 1st floor of Clark Hall and in the Associated Students Lab on the 2nd floor of the Student Union. Additional computer labs may be available in your department/college. Computers are also available in the Martin Luther King Library. A wide variety of audio-visual equipment is available for student checkout from Media Services located in IRC 112. These items include DV and HD digital camcorders; digital still cameras; video, slide and overhead projectors; DVD, CD, and audiotape players; sound systems, wireless microphones, projection screens and monitors.

Course Schedule: JS 15 / Intro Statistics in Justice, Spring 2019

(subject to change with fair notice via Class Announcement & CANVAS Note)

	Week of:	Topics	Readings / Assignments	
Part 1				
	6/3	PEMDAS; Algebra Basics I & II		
	6/3	Introduction to Statistics; Levels of Measurement; Intro to SPSS	Get SPSS;HW 0 & 1; Skim Chapter 1 & Read Syllabus	
	6/10	Central Tendency, Variance & Standard Deviation; Visualizing Data	Read Chapters 2, 3, & 4; HW 2, 3 & 4; Quiz 1	
Part 2				
	6/17	Probability	Read Chapter 7; HW 5 ; Read Chapter 8	
	6/24	Significance Tests	HW 6; Read Chapter 9	
	7/1	Z-Test	Read Chapter 10; HW 7; Quiz 2	
	Part 3			
	7/8	T-Test	Read Chapter 11; HW 8 & 9 ; Read Chapter 12	

7/15