

**San José State University, Spring 2010**  
**Department of Justice Studies**  
**JS203 Seminar in Justice Research Methods and**  
**Statistics**

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<b>Office Hours:</b>	Tuesdays 10am-12pm (MH 527); Thursdays 8:15-9:15pm (lab)
<b>Class Days/Time:</b>	Thursdays 5:30pm – 8:15pm
<b>Classroom:</b>	MacQuarrie Hall TBA (conference room and lab)

**Course Description**

This course builds on the tools and concepts that were presented in JS202. The goals are three fold: to further the student's understanding of research methods and analytical strategies; to develop the student's ability to interpret the results of extant criminological and justice-related research, and; to familiarize the student with a powerful statistics software package, and allow them to develop their analytical skills using said package. Each goal is described in more detail below.

First, the course expands upon JS202 by examining the important role that research methodology plays in the use of statistics in the social sciences. This includes, but is not limited to: developing a thorough understanding of elementary descriptive and inferential statistics; understanding what analytical strategies are appropriate for certain types of data or certain types of questions, and; performing basic parametric and nonparametric tests.

Further, a thorough understanding of those statistics used most commonly in criminal justice research is also necessary. That is, in order to fully understand criminal behavior, or the effects of treatment protocols, or the value of specific policies, one must have a strong grasp of elementary statistics. Thus, the second goal of the course will focus on developing the student's ability to understand the purpose, appropriate use, and interpretation of statistics. This will be achieved largely through the consumption of existing research.

In today's technological world, the use of statistics to develop a better understanding of human behavior and other social science phenomena has become commonplace. As such,

understanding how to use computers to solve problems is paramount for individuals who wish to work within any aspect of criminal justice. Our understanding of criminal behavior, 'hot spots' of crime, and correctional management, for example, is greatly enhanced through the use of statistical analyses. Thus, the final goal of this seminar is built around SPSS – a powerful statistical package designed especially for social and political sciences. This course will teach the student to solve complex social problems using this software package. It is expected that students will become comfortable using this particular program to analyze data in a range of scenarios.

## Learning Objectives

Students will develop:

1. A comprehensive understanding of research methodology used in criminology and justice related fields.
2. Those skills needed to engage in scientifically based research. These include:
  - a. Identify and interpret patterns in raw data
  - b. Understand basic ideas of probability
  - c. Make and interpret elementary statistical inferences
  - d. Compute and interpret hypothesis tests and confidence intervals
  - e. Recognize limitations of statistical analyses and identify pitfalls in their interpretations
3. The ability and confidence to effectively use SPSS in applied research.

## Required Texts

APA (2005 or later) *Publication manual of the American Psychological Association*. 5<sup>th</sup> edition or later.

Field, A. (2005). *Discovering statistics using SPSS*. London: Sage Publications. 2<sup>nd</sup> edition.

Green, S. and N. Salkind (2008). *Using SPSS for Windows and Macintosh: Analyzing and understanding data*. Upper Saddle River, NJ: Prentice Hall. 5<sup>th</sup> edition

Salkind, N. (2005). *Statistics for people who (think they) hate statistics*. Thousand Oaks, CA: Sage Publications. 3<sup>rd</sup> edition.

## Recommended Texts

The optional texts below are undergraduate books that are designed to reach students who are not as comfortable around mathematics. While I may refer to these books in my lectures, they are not required reading for the course. They are simply for those of you who would like a little extra support in understanding statistical concepts.

Gravetter, F. & Wallnau, L. (2008) *Essentials of statistics for the behavioral sciences*. Belmont, CA: Cengage Learning. 6<sup>th</sup> edition

Ritchey, F. (any edition). *The Statistical Imagination*. McGraw Hill

Williams, F. (2009). *Statistical Concepts for criminal justice and criminology*. Upper Saddle River, NJ: Prentice Hall.

## **Classroom Protocol**

### **Instructor's Note on Communication**

As you know, graduate school is a significant undertaking and requires a high level of commitment, time management, organization, and initiative. Thus, it is in your best interest to stay on top of the readings and keep in touch with the instructor. *The best way to keep in touch is in-person during office hours, or at another time by appointment.* If you cannot meet with me in person, I prefer that you email me. Emails will be responded to during business hours (Monday through Friday only). *Please include a phone number in all email communication.* All communication regarding assignment or exam grades must be done in person and *not* via email.

### **Classroom Etiquette**

Tardiness will not be tolerated. I understand that many of you work, but I also understand that you have enrolled in graduate school and are aware of the demands of that commitment. Please arrange with your employer/child care/other to arrive in time for class to begin promptly at 5:30pm on Thursday evenings. Please turn off all cell phones, pagers, PDA's or any other electronic device. The use of anything that beeps or vibrates during class is disruptive and will not be tolerated. If you are caught using a telephone (even silently, e.g. texting), you will be asked to leave the classroom.

*The use of computers during lecture will not be tolerated.*

*The use of computers for anything other than SPSS during lab will not be tolerated.*

## **Dropping and Adding**

Students are responsible for understanding the policies and procedures about add/drop, academic renewal, etc. Refer to the current semester's [catalog policies](http://info.sjsu.edu/static/catalog/policies.html) section at <http://info.sjsu.edu/static/catalog/policies.html> for any add/drop deadlines, policies, and procedures section and specific registration information. [Late drop policy](http://www.sjsu.edu/aars/policies/latedrops/policy/) is available at <http://www.sjsu.edu/aars/policies/latedrops/policy/>. Students should be aware of the current deadlines and penalties for dropping classes.

## **Assignments and Grading Policy**

In order to receive a grade for this course, **all** course requirements must be met and **every** assignment must be completed. Failure to complete any one of them may result in a failing grade for the course.

Deadlines are firm. Late papers will not be accepted (without extenuating personal circumstances due to own or family health; or other university recognized excuse). Plagiarism will not be tolerated on **any** piece of assessment, under any circumstances.

Students found to be guilty of plagiarism will be referred to the University's Honor Council.

Participation and Preparatory Reading (5%): Critical reading, thinking, and writing involve a number of practical skills. These skills must be practiced to be developed and maintained. Graduate students are expected to keep up with class reading, and to attend all class meetings well prepared to contribute to the classroom exchange of ideas and information. Therefore, participation is essential in order to pass JS203. This is especially true at the graduate level and is particularly important given that the class meets only once a week. Readings should be completed prior to the date at which they appear on the syllabus. Students will be required to make at least one 'buddy' to work with during the semester. *Remember: A statistical problem shared is a statistical problem halved.*

Article Critiques (15%): Students will be required to critique three existing studies as reported in various journal articles. This will allow the student to demonstrate their grasp of traditional and evaluative research conducted in justice related fields. Two articles have been pre-selected by the instructor and one will be chosen by the student.

In class maintenance quizzes (15%): Throughout the semester, students will be required to complete three in class/closed book quizzes to monitor their progress in the class.

Midterm exam (20%): The midterm exam will be a take-home exam, distributed in class in week 7 and due 24 hours later.

Homework Assignments (20%): Application equals learning. Therefore, there will be six homework assignments distributed throughout the semester. Students will be required to submit all work associated with each assignment (including selected SPSS output (complete output can be submitted via email), syntax files, and mathematical computations).

Final Project (25%): The final project is designed to measure the student's competence in all areas discussed throughout the course and will be conducted on a common dataset. While it is understood that you will likely work on this project in groups, the final product (and write up of results etc.) must be your own work. Plagiarism will not be tolerated. This project will be due at 5:30pm on the last day of class.

THERE IS NO EXTRA CREDIT IN THIS COURSE  
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## **University Policies**

### **Academic integrity**

Students should know that the University's [Academic Integrity Policy](http://sa.sjsu.edu/judicial_affairs/faculty_and_staff/academic_integrity/index.html) is available at [http://sa.sjsu.edu/judicial\\_affairs/faculty\\_and\\_staff/academic\\_integrity/index.html](http://sa.sjsu.edu/judicial_affairs/faculty_and_staff/academic_integrity/index.html). Your own commitment to learning, as evidenced by your enrollment at San Jose State University and the University's integrity policy, require you to be honest in all your

academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The [Student Conduct and Ethical Development website](http://www.sa.sjsu.edu/judicial_affairs/index.html) is available at [http://www.sa.sjsu.edu/judicial\\_affairs/index.html](http://www.sa.sjsu.edu/judicial_affairs/index.html).

Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include in your assignment any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Policy F06-1 requires approval of instructors.

### **Campus Policy in Compliance with the American Disabilities Act**

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the [Disability Resource Center](http://www.drc.sjsu.edu/) (DRC) at <http://www.drc.sjsu.edu/> to establish a record of their disability.

### **Learning Assistance Resource Center**

The Learning Assistance Resource Center (LARC) is located in Room 600 in the Student Services Center. It is designed to assist students in the development of their full academic potential and to motivate them to become self-directed learners. The center provides support services, such as skills assessment, individual or group tutorials, subject advising, learning assistance, summer academic preparation and basic skills development. The [LARC website](http://www.sjsu.edu/larc/) is located at <http://www.sjsu.edu/larc/>.

### **SJSU Writing Center**

The SJSU Writing Center is located in Room 126 in Clark Hall. It is staffed by professional instructors and upper-division or graduate-level writing specialists from each of the seven SJSU colleges. Our writing specialists have met a rigorous GPA requirement, and they are well trained to assist all students at all levels within all disciplines to become better writers. The [Writing Center website](http://www.sjsu.edu/writingcenter/about/staff/) is located at <http://www.sjsu.edu/writingcenter/about/staff/>.

## JS203 Spring 2010 Course Schedule

The Class Schedule below is tentative. The dynamics and abilities of the individual class often dictate the amount of time spent on classroom discussions and so on. This usually means that it is necessary to adjust some activities or materials as the semester progresses. This makes it particularly important to come to class on time (to receive those announcements) and to check in with the instructor after any absences.

**Table 1 Course Schedule**

W	Date	Topic	Due dates	Reading
1	01/28	LECTURE: Introduction and syllabus		Salkind 1 Field 1, 2
		LAB PRACTICE: getting your feet wet without instruction Set homework: Green & Salkind (G&S): unit 1 (lessons 1-4)		
2	02/04	LECTURE: frequency analysis		Salkind 1 Field 1, 2
		LAB: introduction to SPSS, data entry, variable labels, recap from last week, go over homework (G&S): unit 1 (lessons 1-4)		
3	02/11	Frequency analysis cont'd, measures of central tendency	HW1	Salkind 2 Field 1, 2
		LAB: Data coding, categorizing, measures of central tendency G&S: unit 2 (lessons 5-11)		
4	02/18	Measures of dispersion, reliability and validity	HW2 AC1 QUIZ 1	Salkind 3, 6 Field 1, 3
		LAB: Selecting cases, recoding, comparing measures, reliability G&S: unit 3 (lessons 12-13); unit 4 (lesson 20)		
5	02/25 ACJS	<b>NO CLASS:</b> <i>Work on two article critiques this week in lieu of class</i>		
6	03/04	Normal curve, probability, z scores	HW3	Salkind 8 Field 1, 5
		LAB: midterm/review of everything so far G&S: unit 9 (lessons 37-38)		
7	03/11	Inferential statistics, hypothesis testing, independent and paired sample t-tests, significance	AC 2 AC 3 QUIZ 2	Salkind 9, 10, 11 Field 7
		LAB: Hypothesis testing G&S: unit 6 (lessons 22-24)		
8	03/18	Analysis of variance (ANOVA)	HW4	Salkind 12 Field 8
		LAB: ANOVA in SPSS G&S: unit 7 (lessons 25-26)		
9	03/25	Correlations, describing relationships	HW5	Salkind 5, 14 Field 4
		LAB: Correlations, reliability and validity G&S: unit 8 (lessons 31-32)		
10	04/01	<b>NO CLASS: SPRING BREAK</b>		
11	03/25	Nonparametric tests: Chi Square, contingency tables	HW6 QUIZ 3	Salkind 16 Field 16
		LAB: cross tabs and chi square G&S: unit10 (lessons 40-41)		

12	04/08	Factor Analysis		Field 15
		LAB: Factor Analysis in SPSS G&S: unit 9 (lesson 36)		
13	04/15	Linear Regression		Salkind 15 Field 5
		LAB: Linear Regression in SPSS G&S: unit 8 (lessons 33-34)		
14	04/29	<b>NO CLASS: Work on final project</b>		
15	05/06	<b>NO CLASS: Work on final project</b>		
16	05/13	LAST CLASS – logistic regression?	FINAL	

Grading Scale:

97-100%	A+	77-79	C+
94-96	A	74-76	C
90-93	A-	70-73	C-
87-89	B+	67-69	D+
84-86	B	64-66	D
80-83	B-	60-63	D-
		0-59	F