San José State University
Department of Justice Studies
JS 203: Seminar in Applied Statistics in Justice
Spring 2021

Course and Contact Information

Instructor:	Bryce Westlake
Office Location:	Health Building 210B
Telephone:	408-924-2743
Email:	Bryce.Westlake@sjsu.edu
Office Hours:	Monday, 3:00pm to 5:00pm
Class Days/Time:	Wednesday, 4:30 pm to 7:15 pm
Classroom:	Zoom (link provided on Canvas)
Prerequisites:	STAT 95, JS 114, or Equivalent

Course Format

I will utilize the Canvas Learning Management System as a means for distributing course materials such as syllabus, handouts, lecture slides, assignment instructions, and communications about changes to the course. You are responsible for regularly checking with the messaging system through OneSJSU to learn of updates.

Course Description

An evaluation of specific statistical methods for quantitative and non-quantitative analyses, concentrating on applications and interpretations in justice related settings.

Course Goals

The purpose of this course is to provide students with a baseline understanding of statistical methods commonly used in justice fields. This is important as students will be required to conduct and/or evaluate research in their chosen professions that can greatly impact their community. As a result, it is imperative that students have the tools to critically assess the validity and reliability of the data they are presented. My goal in this course is to simplify the basics of several statistical methods so that students can go into their careers with confidence that they can make appropriate research decisions.

Course Learning Outcomes (CLO)

Upon successful completion of this course, students will be able to:

1. Discuss the basic procedures of common quantitative statistical procedures used in criminology.
2. Identify and apply the most appropriate quantitative statistical procedures for the data.
3. Conduct, present, and write scientific research reports on quantitative data

Required Texts/Readings

Required

Hanneman, R., & Riddle, M. (2005). *Introduction to Social Network Methods.* Riverside, CA: University of
California, Riverside. Published in digital form at http://faculty.ucr.edu/~hanneman/nettext.
Other readings supplied via Canvas

Recommended

Yockey, R.D. (2017). *SPSS Demystified (3rd Edition).* New York, NY: Routledge. ISBN13: 978-1138286283.

Other technology requirements / equipment / material

Depending on the method selected for their final research paper, students will need to have access to SPSS or
UCINET. More details will be provided in class.

Course Requirements and Assignments

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of
45 hours over the length of the course (normally three hours per unit per week) for instruction,
preparation/studying, or course related activities, including but not limited to internships, labs, and clinical
practica. Other course structures will have equivalent workload expectations as described in the syllabus.

Critical Discussion (4 %): All students are expected to take an active role in each seminar as both learners and
teachers. You are expected to complete the weekly required readings prior to each seminar. You are going to
benefit the most from class discussions, explanations, and activities if you have some knowledge about the
concepts studied each week. In each class you should demonstrate that you have read the assigned materials
ahead of time, raise and discuss issues, and fully engage with the class. Discussion in seminars will focus on
both the readings and on your research projects. This assignment will specifically address CLO 1 & 2.

Homework (16%): Students will complete eight homework assignments that will involve analyzing data using
the statistical method covered that week. This assignment will specifically address CLO 1 & 2.

Research Presentation (20%): Prior to submitting a final paper, students will present their research to the class
to a) get experience at presenting to their peers, and b) receive feedback from peers and the instructor to
integrate into their final research paper submission. More in-depth requirements are outlined in the Assignment
Guidelines provided on Canvas. This assignment will specifically address CLO 3.

Research Paper (35%): Students will write an original, quantitative, research paper. You are responsible for
finding your own dataset to analyze. There are plenty of datasets available, free of charge, through public
repositories. You may use any of the techniques covered in the course. In addition to your research paper, you
are to submit your final dataset(s) and a copy of the syntax file with notations, used to create the datasets and
analyze the data. The research paper is to be properly formatted and referenced, using the style guide provided
on Canvas. More in-depth requirements are outlined in the Assignment Guidelines provided on Canvas. This
assignment will specifically address CLO 3

Big Quiz (25%): The *Big Quiz* will occur during the final week of the course and will be comprised of material
covered in the readings and lectures. More details will be provided as the date draws near. This assignment will
specifically address CLO 1 & 2.

Final Examination or Evaluation

Faculty members are required to have a culminating activity for their courses, which can include a final examination, a final research paper or project, a final creative work or performance, a final portfolio of work, or other appropriate assignment.

Grading Information

In order to receive a grade for this course, all course requirements must be met, and every assignment must be completed. Failure to complete all assignments may result in a failing grade for the course. Deadlines are firm. Late assignments/papers will not be accepted for full credit (without extenuating personal circumstances due to own or family health; or other university recognized excuse). In such cases, appropriate documentation must be shown to the instructor. Late assignments/papers will lose 10% for every calendar day that they are late, including weekend days. There are no opportunities for extra credit in this course.

Determination of Grades

A (plus)	97% to 100%	A	93% to <97%	A (minus)	90% to <93%
B (plus)	85% to <90%	B	80% to <85%	B (minus)	75% to <80%
C (plus)	70% to <75%	C	65% to <70%	C (minus)	60% to <65%
F	Below 60%				

Classroom Protocol

Office Hours: I am very flexible with office hours for graduate students. Let me know when you want to see me and we will arrange something.

Email: Although I am receptive to email correspondence, I will only reply (to course-related emails) if I can do so in a few sentences. Please do not ask me to explain course concepts via email. If it requires more than a few sentences, you need to see me in-person.

Expectations of Students: I have very high expectations for graduate students that includes treating you as adults, capable of prioritizing your own schedule and seeking guidance/assistance when needed. However, with high expectations comes my dedication to helping you meet those expectations. If issues arise or if you are having struggles, the best advice I can give you is to contact me sooner rather than later. The less information I have to work with, the less I can be of assistance. It is your responsibility to seek out assistance when you need it. It is my responsibility to provide assistance when you request/need it.

Classroom: Students are expected to attend *all* classes and arrive on-time, prepared to discuss course material at the beginning of class. You are welcome to eat in class, but please be considerate of your classmates when doing so with regards to mess and smells. NO cell phone use during class. I expect them to be put away during class unless there is an emergency or family situation that requires you to have them out. If so, notify me at the beginning of the class, so I am aware of why it is out.

University Policies

Per University Policy S16-9 *(http://www.sjsu.edu/senate/docs/S16-9.pdf)*, relevant information to all courses, such as academic integrity, accommodations, dropping and adding, consent for recording of class, etc. is available on Office of Graduate and Undergraduate Programs' Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/" Make sure to review these university policies and resources with students.

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Spring 2021 Course Schedule

This course schedule is subject to change with fair notice, at the instructor's discretion. All reading assignments listed should be completed prior to class on that date. Additional readings may be assigned.

Date	Topic	Readings	Videos
Jan 27th	Introduction & Descriptive Statistics	None	https://youtu.be/LPHYPXBK_ks https://youtu.be/vrWYw8d2830 https://youtu.be/zC3GaPBJ4c4
Feb 3rd	Variance, Standard Deviation, Normal Curve, & Statistical Significance *Homework #1 Due Feb 7th*	None	https://youtu.be/MRqtXL2WX2M https://youtu.be/JIIXQaMXBVM https://youtu.be/gV1gUdFvI54 https://youtu.be/nb75_GFPD9A
Feb 10th	T-Test *Homework #2 Due Feb 14th*	T-Test (Canvas)	https://youtu.be/pTmLQvMM-1M
Feb 17th	Chi-Square (Francesca) *Homework #3 Due Feb 21st*	Chi-Square 1 (Canvas) Chi-Square 2 (Canvas)	https://youtu.be/SvKv375sacA?t=821 https://youtu.be/GMz0HAxubuU
Feb 24th	ANOVA *Homework #4 Due Feb 28th*	ANOVA 1 (Canvas) ANOVA 2 (Canvas)	Statistics 101: ANOVA (Videos 1-4) - https://www.youtube.com/playlist?list=PLIeGtxpvyG-KA-BLkL391X__r0kU4_hm5
Mar 3rd	Linear Regression *Homework #5 Due Mar 7th*	Linear Regression (Canvas)	Statistics 101: Simple Linear Regression (Videos 1-4) - https://www.youtube.com/watch?v=ZkjP5RJLQF4&list=PLIeGtxpvyG-LoKUpV0fSY8BGKIMIdmfCi
Mar 10th	Logistic Regression Homework #6 Due Mar 14th	Logistic Regression (Canvas)	https://youtu.be/zAULhNrnuL4 https://youtu.be/ckkiG-SDuV8 https://youtu.be/gcr3qy0SdGQ
Mar 17th	Ordinal Regression *Homework #7 Due Mar 21st*	Ordinal Regression 1 (Canvas) Ordinal Regression 2 (Canvas)	https://youtu.be/c-hNBdpIDw0 https://youtu.be/jWIJ7P1G9P4 https://youtu.be/RVBiD7Setms

Date	Topic	Readings	Videos
Mar 24th	Multiple Regression *Homework #8 Due Mar 28th*	Multiple Regression (Canvas)	Statistics 101: Multiple Regression (Videos 1-4) - https://www.youtube.com/playlist?list=PLIeGtxpvyG-IqjoU8IiF0Yu1WtxNq_4z-
Mar 31st	**SPRING BREAK (NO CLASS)**		
Apr 7th	Social Network Analysis I	Hanneman & Riddle Ch. 1-7	https://youtu.be/fgr_g1q2ikA
Apr 14th	Social Network Analysis II	Hanneman & Riddle Ch. 8-13	https://youtu.be/2iViaEAytxw https://youtu.be/NgUj8DEH5Tc
Apr 21st	**Student Presentations**	None	None
Apr 28th	**Student Presentations**	None	None
May 5th	Course Review	None	None
May 12th	**Big Quiz**	None	None
Final Exam	**Final Paper Due**		