San José State University College of Social Sciences Anthropology 235, Quantitative Methods, Section 1, Spring 2021

Instructor: Dr. Charlotte Sunseri

Office Location: Clark Hall 404G [note: office hours will be online]

Telephone: (408) 924-5713 [note: voicemail not routinely checked in Fall

semester]

Email: charlotte.sunseri@sjsu.edu

Office Hours: Wednesday 9:30-11:30AM, or by appt.

Class Days/Time: Online, asynchronous

Classroom: Online

Prerequisites: Students must have successfully completed STAT 95 or

equivalent.

Course Description

This course presents advanced quantitative methods with the goal of equipping students for applied anthropology research as well as the knowledge to evaluate anthropological and social scientific articles. The seminar emphasis will be on understanding statistics, creating databases, using statistical software packages, and employing proper statistics. Students will engage with hands-on use of statistical software packages and application of methods in a real-world setting through a term project and occasionally lead seminar discussions. Since this is an anthropology course rather than solely a statistical course, the focus will be on teaching students how to think about quantitative data sets in social science settings and think about the role these data play in addressing research questions. Students who have a willingness to think and a desire to learn are fully equipped to be successful in this class, regardless of any prior knowledge of statistics or math-phobias.

Course Format: Online Course

This course adopts an online classroom delivery format. The course will require students to use devices to access to the Canvas learning platform using a computer, tablet, or phone. See <u>University Policy F13-2</u> at http://www.sjsu.edu/senate/docs/F13-2.pdf for more details.

Faculty Web Page and MYSJSU Messaging

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on Canvas Learning Management System course login website at http://sjsu.instructure.com. You are responsible for regularly checking with the messaging system through MySJSU on Spartan App Portal http://one.sjsu.edu (or other communication system as indicated by the instructor) to learn of any updates. For help with using Canvas see Canvas Student Resources page (http://www.sjsu.edu/ecampus/teaching-tools/canvas/student_resources)

Course Goals and Student Learning Objectives

Course Content Learning Outcomes (LO)

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

- LO1 Apply common statistical tests to analyze anthropological data sets.
- LO2 Critically examine the use of statistical analyzes in anthropological arguments and published articles.
- LO3 Build data sets appropriate to statistical analysis to address anthropological research questions.

Departmental Objectives

The Department of Anthropology seeks to enhance student knowledge and skills in the following areas.

Knowledge

- 1. Understanding culture as the distinguishing phenomenon of human life, and the relationship of human biology and evolution.
- 2. Awareness of human diversity and the ways humans have categorized diversity.
- 3. Knowledge of the significant findings of archaeology, cultural anthropology, and physical anthropology, and familiarity of the important issues in each sub-discipline.
- 4. Knowledge of the history of anthropological thought and its place in modern intellectual history
- 5. Comprehension of migration, colonialism, and economic integration as significant phenomenon shaping global society.

Skills

- 6. Ability to access various forms of anthropological data and literature.
- 7. Awareness of importance and value of anthropological knowledge in contemporary society, and the ability to apply it to social issues.
- 8. Knowledge of the research methods of the sub-disciplines of anthropology, and the ability to apply appropriate research methods in at least one sub-discipline.
- 9. Ability to present and communicate anthropological knowledge and the results of anthropological research to different audiences.

Professional Values

10. Knowledge of political and ethical implications of social research

Required Texts/Readings

SPSS Survival Manual, Fourth Edition. 2010. Julie Pallant. ISBN: 0335242391

Supplemental readings and articles (in PDF format) made available 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 (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in University Policy S12-3 at http://www.sjsu.edu/senate/docs/S12-3.pdf.

Seminar activities (4 pts/activity= **8 points**): Twice throughout the semester a teambased activity with occur in the online module, including Module 6 (an analysis and presentation based on a Frasier tv episode) and in Module 9 (a seminar led by students discussing a spatial analysis article).

Annotations of Readings: Each module, you should prepare an annotated bibliography to summarize the main points and contributions of each reading selection for the week that is an academic article textbook selection. You should concisely summarize the research problem, the main points, the methodology, and the article's conclusion. Format your annotations like a bibliography (including all necessary citation elements and organized alphabetically by author) with single-spaced annotations below each entry. Do not regurgitate the abstract included at the beginning of each article—rather, write an original summary of its main points, focusing on what is most relevant to this class. For multiple chapter selections from the textbook, include the notes for these in a single annotation for that module (1 point each annotation; 20 points total)

Discussion Board posts (2 pts/analysis =16 points): There will be several discussion board posts throughout the semester. For those that involve posting an analysis of a self-identified article which uses the statistical test of that module, please include this information in your discussion post: the statistical method/test used, the study's research design, variables and sampling strategies, how the results are reported for the stats test you are highlighting.

SPSS lab modules (2.5 pts/module =**15 points**): Six times throughout the semester, students will complete statistical analysis modules that will teach the use of SPSS software. Please download this software from the university's ITS website using an SJSU login.

Mini-projects (3x20pts=**60 pts):** Three mini-projects will provide hands-on experience with quantitative data generation using methods of ethnographic coding, survey development, and spatial analysis.

Total points in course=119

Final Examination or Evaluation

The final exam is a project-based report and presentation for Mini-Project #3. <u>University policy S17-1</u> (http://www.sjsu.edu/senate/docs/S17-1.pdf) which states that "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

```
A plus >99%, A 94-99%, A minus 90-93 % B plus 88-89%, B 84-87%, B minus 80-83% C plus 78-79%, C 74-77%, C minus 70-73% D plus 68-69%, D 63-67%, F <63%
```

Classroom Protocol

- Students will be held to the highest standards of academic integrity and intellectual
 ethics. The chief product in the social sciences is new knowledge and original
 thinking. Plagiarism is intellectually dishonest and a form of theft. It will not be
 tolerated and will be dealt with in accordance with university Academic Integrity
 Policy.
- **No** late assignments will be accepted without prior instructor approval and documented cause. Unless otherwise specified in the instructions, assignments will not be accepted by email or after the last scheduled class.
- The instructor reserves the right to adjust the syllabus, exam dates, or course content as deemed necessary to facilitate the highest achievement and performance of the class, or to explore timely topics.

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.

General Expectations, Rights and Responsibilities of the Student

As members of the academic community, students accept both the rights and responsibilities incumbent upon all members of the institution. Students are encouraged to familiarize themselves with SJSU's policies and practices pertaining to the procedures to follow if and when questions or concerns about a class arises. See <u>University Policy S90–5</u> at http://www.sjsu.edu/senate/docs/S90-5.pdf. More detailed information on a variety of related topics is available in the <u>SJSU catalog</u>, at http://info.sjsu.edu/web-dbgen/narr/catalog/rec-12234.12506.html. In general, it is recommended that students begin by seeking clarification or discussing concerns with their instructor. If such conversation is not possible, or if it does not serve to address the issue, it is recommended that the student contact the Department Chair as a next step.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester's Catalog Policies section at http://info.sjsu.edu/static/catalog/policies.html. Add/drop deadlines can be found on the current academic year calendars document on the Academic Calendars webpage at http://www.sjsu.edu/provost/services/academic_calendars/. The Late Drop 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.

Information about the latest changes and news is available at the <u>Advising Hub</u> at http://www.sjsu.edu/advising/.

Consent for Recording of Class and Public Sharing of Instructor Material

<u>University Policy S12-7</u>, http://www.sjsu.edu/senate/docs/S12-7.pdf, requires students to obtain instructor's permission to record the course and the following items to be included in the syllabus:

- "Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor's permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material."
 - It is suggested that the greensheet include the instructor's process for granting permission, whether in writing or orally and whether for the whole semester or on a class by class basis.
 - In classes where active participation of students or guests may be on the recording, permission of those students or guests should be obtained as well.

• "Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval. You may not publicly share or upload instructor generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent."

Academic integrity

Your commitment, as a student, to learning is evidenced by your enrollment at San Jose State University. The <u>University Academic Integrity Policy S07-2</u> at http://www.sjsu.edu/senate/docs/S07-2.pdf requires 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 is available at https://www.sjsu.edu/studentconduct/.

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 at Phace of the president/docs/directives/PD_1997-03.pdf requires that students with disabilities requesting accommodations must register with the Accessible Education Center (AEC) at http://www.sjsu.edu/aec to establish a record of their disability.

Anth 235, Section 1 / Quantitative Methods, Spring 2021, Course Schedule

Schedule is subject to change with fair notice.

Table 1 Course Schedule

Week	Date	Topics, Readings, Assignments, Deadlines
1	Jan 27-29	Module 0: Course Welcome: Introduction to the course, SPSS, Pallant textbook; Canvas functions
		Discussion: test entry to introduce yourself
2	Feb 1-5	Module 1: Quantitative Anthropology; Types of data and variables, unit of analysis, samples and populations SPSS Module: defining variables, entering data Read: Pallant Ch 1-4, Angrosino 10, Bernard 4, skim Chibnik 1985 Discussion: how you will use sampling in your MA project
3	Feb 8-12	Module 2: Developing Surveys and Questionnaires; design and use of scaled variables Read: Pallant Ch 9; Angrosino 9&11, Bernard 12&13
4	Feb 15-19	Mini-project 1
5	Feb 22-26	Module 3: Descriptive statistics and analysis basics; Graphs and frequency distributions, mean, standard deviation and variance, z scores, normal curve, parametric versus non-parametric SPSS Module: Exploring your data, normality assessment Read: Pallant Ch. 6-7
6	Mar 1-5	Module 4: Comparing groups, part 1: Intro to hypothesis testing, <i>p</i> and significance; t-tests, Z-tests, rank order (Mann-Whitney, Wilcoxon) SPSS Module: Hypothesis testing with t-tests, rank order, and Z-tests Read: Pallant selections (one annotation with Ch. 10 & 17 & pg. 227-232 (Mann-Whitney/Wilcoxon sections); Weiss (pdf) Discussion: self-identified article (uses t-test, z-test, Mann-Whitney, or Wilcoxon)
7	Mar 8-12	Module 5: Comparing groups, part 2: Analysis of variance and non-parametric equivalents (Kruskal-Wallis, Friedman), multivariate analysis SPSS Module: Hypothesis testing with ANOVA Read: Pallant selections (one annotation for Ch 18, skim 21-22, p. 232-237 (Kruskal-Wallis/Friedman sections)) Discussion: self-identified article (uses ANOVA, K-W, Friedman, or multivariate) Sign up for activity team next module (coding Frasier episodes)
8, 9	Mar 15-19, Mar 22-26	Module 6: Ethnographic coding; Quantitative meets Qualitative, ethnographic interviews, OCM codes, joining qualitative and quantitative research Read: Weisner 2012 (pdf); Bernard 9, Bernard 11, Bernard 17, Angrosino 12, Bernard Appendix C (no annotation for this one) Discussion: codes you made for main themes in Frasier episode Team presentation: practicing ethnographic/visual coding
10	Mar 29-Apr 2	Spring Break!

11, 12	Apr 5-9, Apr 12-16	Mini-project 2
13	Apr 19-23	Module 7: Lecture 9: Comparing groups, part 3: Chi-square tests
		SPSS Module: Hypothesis testing with Chi-square tests
		Read: Pallant pg. 215-221; Havlicek (pdf)
		Discussion: self-identified article (uses chi-square)
14	Apr 26-30	Module 8: Exploring relationships among variables: Correlation; Pearson's
		r, Spearman's rho, prediction, regression
		SPSS Module: Correlations
		Read: Pallant Ch 11
		Discussion: self-identified article (uses correlation)
		Sign up for next week's seminar team
15	May 3-7	Module 9: Spatial analysis
		Seminar discussion: Spatial analysis (team presentations of article)
		Read: Your assigned article from this list: Chalmers & Fabricius 2007
		(pdf), Logan & Zhang 2004 (pdf), Goodchild et al. 2000 (pdf), Gatrell &
		Rigby 2004 (pdf)
		Discussion: proposed spatial analysis project ideas
		Sign up for mini project 3 teams (or solo)
16, 17	May 10-14,	Mini-project 3
	May 17	Presentation of spatial coding projects by teams

Final: Thursday, May 20, 5:15-7:30 → *Spatial coding mini-project due by 7:30PM