# San José State University College of Social Sciences Anthropology 235, Quantitative Methods, Section 1, Spring 2013

**Instructor:** Dr. Charlotte Sunseri

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**Office Hours:** T/Th 9-10:30AM, or by appt.

Class Days/Time: Thursday 6:00-8:45PM

Classroom: WSQ 004

**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 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**

Statistics for the Behavioral and Social Sciences, 4/e: A Brief Course, by Arthur Aron, Elaine N. Aron, and Elliot Coups. Fifth Edition. Prentice-Hall. ISBN: 0205797253 (Note: You will not need to purchase the Student Version of SPSS packaged with this!)

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

Supplemental readings and articles (in PDF format) made available on Desire2Learn.

#### **Classroom Protocol**

- Participation is a vital element in a social science environment and attendance is foundational to academic success. Students are expected to do readings and activities prior to class, attend class every meeting, and engage in discussion of the material.
- Please turn off all electronic devices during class and use computers only for note-taking or SPSS analysis.

# **Dropping and Adding**

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester's <a href="Catalog Policies">Catalog Policies</a> section at <a href="http://info.sjsu.edu/static/catalog/policies.html">http://info.sjsu.edu/static/catalog/policies.html</a>. Add/drop deadlines can be found on the <a href="current academic calendar">current academic calendar</a> web page located at

http://www.sjsu.edu/academic\_programs/calendars/academic\_calendar/. The <u>Late Drop Policy</u> 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/.

# **Assignments and Grading Policy**

Students will be evaluated on the basis of:

**Seminar participation and preparation** (2 pts/wk= 30 points): Each student is expected to attend class, bring notes on readings assigned for that day's discussion, and bring completed answers to the practice problem sets (when assigned). Students who fail to attend seminar meetings, who arrive late, or who do not substantively contribute to the discussion will not receive credit for the week.

Article analysis and presentation (2 pts/analysis, 5 pts/presentation=15 points): Each week of Part I (Data Analysis), students are expected to find a relevant quantitative-based anthropology article. These five self-identified case studies will be analyzed and students will submit short summaries (1-2 pages single-spaced) describing the research design, variables and sampling strategies, and quantitative methods of the study. The papers must be turned in each week to the instructor at the beginning of class—no papers will be accepted late or by email. In addition, each week student teams will be responsible for leading discussions of the critical analysis of statistics as applied in published articles. These presentations will be assigned ahead of time and be team-led discussions. The presenters will be still be expected to each turn in their individual analysis write-ups, but all presenters may share a single article selection for the analysis.

**Midterm exam** (55 pts): At the end of Part I (Data Analysis), a midterm exam will include a mix of multiple choice and short answer questions. The exam will be given during class time and cover information from lecture, readings, and short problem sets.

**Mini-projects** (2x15pts=30 pts): Two mini-projects during Part II will provide hands-on experience with methods of ethnographic coding and survey development. These activities are designed to be completed individually and will be assigned during lecture and due the following class meeting.

**Term project** (70 pts): Students will work in small teams to complete a statistical analysis of a real-world study. This will involve development of research problem (5 pts), literature review of previous studies on the topic and data set (5 pts), methods (5 pts), data structured in SPSS (5 pts), and drawing conclusions commensurate with the statistical results. During the course of this project students will report preliminary findings to the instructor for feedback (5 pts), present findings to the class and discuss problems encountered (5 pts), develop a complete draft of project for peer review of text (5 pts), and produce a final project write-up in the form of an academic article or grant proposal (20 pts). Team member contributions (15 pts) will be assessed multiple times during the course of this project.

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Total points in course=200
Grading Distribution
A+ >99%, A 94-99%, A- 90-93 %
B+ 88-89%, B 84-87%, B- 80-83%
C+ 78-79%, C 74-77%, C- 70-73%
D+ 68-69%, D 63-67%, F <63%
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#### Policies:

- 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**

#### Academic integrity

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The <u>University's Academic Integrity policy</u>, located at <a href="http://www.sjsu.edu/senate/S07-2.htm">http://www.sjsu.edu/senate/S07-2.htm</a>, 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 <u>Student Conduct and Ethical</u> <u>Development website</u> is available at 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 your assignment or any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Policy S07-2 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 <u>Disability Resource Center</u> (DRC) at http://www.drc.sjsu.edu/ to establish a record of their disability.

# 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 <a href="Writing Center website">Writing Center website</a> is located at <a href="http://www.sjsu.edu/writingcenter/about/staff/">http://www.sjsu.edu/writingcenter/about/staff/</a>.

# Anth 235, Section 1 / Quantitative Methods, Spring 2013, Course Schedule

Schedule is subject to change with fair notice.

All supplemental readings and article pdfs available on Desire2Learn course website.

**Table 1 Course Schedule** 

Week	Date	Topics, Readings, Assignments, Deadlines
1	Jan 24	Introduction to course and quantitative research; introduction to SPSS and Pallant; presentation teams and term project teams assigned
2	Jan 31	Part I: Data analysis and pattern interpretation  Lecture 1: Quantitative Anthropology—Types of data and variables, unit of analysis, samples and populations,  Read: Aron Ch 1, two supplemental readings (pdf)
		<u>Lecture 2: Descriptive statistics and analysis basics</u> —Graphs and frequency distributions, mean, standard deviation and variance, z scores, normal curve, parametric versus non-parametric, hypothesis testing, <i>p</i> and statistical significance, Read: Aron Ch 2, 4-5; Pallant Ch. 6-7; <i>self-identified article</i>
3	Feb 7	Lecture 3: Comparing groups, part 1: t-tests, Z-tests, rank order (Mann-Whitney, Wilcoxon)  Read: Aron Ch 6, 8, 9, p. 395-401; Weiss (pdf); self-identified article  Download SPSS to your personal computer by this date!  Proposal due: research problem statement
4	Feb 14	Lecture 4: Comparing groups, part 2: Chi-square, Read: Aron Ch 11; Havlicek (pdf), Worobe & Angel (pdf); self-identified article
5	Feb 21	<u>Lecture 5: Comparing groups, part 3</u> : Analysis of variance and non- parametric equivalents (Kruskal-Wallis, Friedman), multivariate analysis Read: Aron Ch 10; <i>self-identified article</i> <i>Literature review &amp; data set due</i>
6	Feb 28	Lecture 6: Relationships among variables: Correlation (Pearson's r, Spearman's rho), prediction, regression Read: Aron Ch 3; self-identified article Bring to class questions for midterm prep
7	Mar 7	Part II: Anthropological research & quantitative data collection methods  Lecture 7: Developing your research design: Social science data sets; choosing the right statistic, applying these methods to your research, reporting statistics  Read: Pallant Ch. 1-5, 10; Aron Ch 12, supplemental reading (pdf)

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8	Mar 14	Lecture 8: Quantitative Data in Anthropology I: Ethnographic interviews,		
		OCM codes, joining qualitative and quantitative research		
		Read: Bernard 1996 (pdf); Weisner 2012 (pdf); four supplemental readings		
		(pdf)		
		Methods section due		
9	Mar 21	Lecture 9: Quantitative Data in Anthropology II: Surveys and		
		questionnaires, structured interviews, scales		
		Read: Pallant Ch 9; two supplemental readings (pdf)		
		Ethnographic coding mini-projects due		
		Data structured: raw data entered into SPSS due		
Spring Break! Mar 25-29				
10	Apr 4	No class—SAA conference. Work on term projects during this time.		
11		Lecture 10: Quantitative Data in Anthropology III: Historical records,		
11	Apr 11	unstructured observation, artifactual datasets		
	1	Read: Supplemental reading (pdf)		
		Survey mini-projects due		
12	Apr 18	Special topic: Spatial analysis in anthropology		
12	Apr 16	Read: Chalmers & Fabricius 2007 (pdf); Logan & Zhang 2004 (pdf);		
		Goodchild et al. 2000 (pdf); Gatrell & Rigby 2004 (pdf)		
		SPSS Lab—bring laptops and/or data sets to class		
13	Apr 25	Special topic: The politics of data, ethics		
13	71pi 23	Read: Agrawal 2002 (pdf); Palsson and Rabinow 1999 (pdf); Code of		
		Ethics of the American Anthropological Association		
		Part III: Project Development		
		Developing strong charts, graphs, and interpretative statements		
		SPSS Lab—bring your laptops and/or data sets, in-class analysis		
		Preliminary results due		
14	May 2	**Present your project to your peers (project status, tentative findings,		
	Way 2	problems encountered so far); address roadblocks		
15	May 9	**Peer-review of term project drafts (include research question,		
	1.120, 7	hypotheses, brief literature review, methods, data analysis, and		
		interpretations)		
		Where to go from here, course wrap-up		
		Read: Przeworski and Salomon (pdf)		

Final: Thursday, May 16 at 5:15-7:30 [Write-up of term project (article or grant proposal) due by email to instructor]