STEPHEN F. AUSTIN STATE UNIVERSITY
Department of Anthropology, Geography, and Sociology
SOCIOLOGY 379.001 - DATA ANALYSIS (CRN: 13832)
Fall, 2017 (August 28 through December 15)

Professor
Dr. Ray Darville, Regents (2016-2017) Professor of Sociology
Office: LAN350 (faculty office)/LAN335 (department office)
Phone: (936) 468-2256
FAX: (936) 468-2162
Web Address: d2l.sfasu.edu
E-mail: rdarville@sfasu.edu (email through D2L only)
Office Hours: 8:00-10:00 Mondays, 2:00-3:00 Tuesdays, 8:00-10:00 Wednesdays, 10:00-12:00 Thursdays; others by appointment; others by appointment
Class Hours: 10:00-10:50 MWF
Classroom: FG78
Assistant: (936) 468-4405

Course Description
Study of the fundamentals of statistical analysis. Examination of univariate, bivariate, and selected multivariate statistical techniques using statistical software. Prerequisites: three hours math (MTH220 is strongly suggested). Writing enhanced.

Program Learning Outcomes for Sociology
1. The student will be able to identify, compare, and contrast sociological classical and contemporary theories.
2. The student will be able to identify the principles of good social scientific research design. Such principles include validity, reliability, precision in measurement, and sampling methodology.
3. The student will possess sociological knowledge as evidenced by the identification of the major concepts involved with social stratification, demography, race and ethnic relations, deviance, and globalization.
4. The student will be able to apply sociological knowledge and skills to a variety of settings.
5. The student will recognize the implicit assumptions behind claims of knowledge about the social world, will be able to evaluate and distinguish between strong and weak arguments, and will be able to draw conclusions from a set of premises.
6. The student will be able to read theoretical arguments and to identify their major strengths and weaknesses.
7. The student will be able to analyze a data set using statistical techniques and draw conclusions from the results.
Student Learning Outcomes
After successfully completing this course, a student will be able to
1. describe basic concepts in data analysis such as central tendency, dispersion, descriptive statistics, inferential statistics, sampling distributions, sampling error, significance level, hypothesis testing, confidence interval, margin of error ...
2. explain what each of the following basic statistics tells you: mode, median, mean, minimum, maximum, range, standard deviation, standard error, ...
3. determine what types of statistical analysis are appropriate for a particular research question and a particular data set
4. use SPSS to conduct statistical analyses
5. take raw data and create an SPSS data set
6. draw appropriate conclusions from statistical analyses
7. present results in written form that are clear, correct, and relevant to the research question
8. correctly complete all the steps in t-statistic, F-ratio, and chi-square hypothesis tests

<table>
<thead>
<tr>
<th>Program Learning Outcome for Sociology</th>
<th>Supported Student Learning Outcome</th>
<th>Skill Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLO1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLO2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLO3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLO4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLO5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLO6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLO7</td>
<td>1-8</td>
<td>Intermediate</td>
</tr>
</tbody>
</table>

Course Materials
- IBM SPSS Statistics 24. You will be using SPSS throughout the semester. You may purchase this program for personal use and/or use the program at the library computer labs (LINC).
- Hand-held calculator
- Microsoft Word or compatible word processing program
- Internet Browser. Chrome is recommended.

Course Requirements
- Examinations. There will be three in class, online, or take-home examinations, including the final exam. Each exam may consist of multiple-choice questions and short answer questions. Each examination is worth a total of 100 points and will be based on class lectures, the textbook, and other assigned readings. Some of the questions will be basic knowledge questions while others build on that knowledge gained through applied questions. Applied questions require you to understand the material and to be able to think through a problem or to engage in abstract thinking. Much of these questions will involve the written interpretation of
statistical output from SPSS. The written assignments are designed to improve your knowledge and your skills so that you will hopefully perform at a higher level during examinations. Complete instructions will be given when appropriate.

- **Chapter Reading Quizzes.** With each chapter that you read and cover in the Szafran book, you will have a chapter reading quiz. These will be taken entirely using D2L. Each quiz will consist of 10 randomly-selected questions from a test bank for each chapter; each test bank has about 30 questions. Some questions will be multiple-choice questions and some will be true-false questions. Each question is worth 10 points, and each quiz is worth 100 points. *I do not drop any quiz scores.* Failure to take the quiz will result in a score of 0 for that quiz. The time limit is 15 minutes to take each quiz. They are open-note and open-book. You may use your lecture notes when taking the quizzes, but the final authority is the textbook. This means that if there is a difference between lecture notes and the textbook, I will use the answer in the book for the key. Over the last few years, I have found a moderate, positive relationship between exam scores and quiz scores. This means that students who score well on the quizzes generally do well on the exams; but, keep in mind that this is a pattern and that there are exceptions. While you may see each quiz as relatively unimportant in the overall scheme of the course, quiz scores count for a whole letter grade in the final determination of the course average. Hence, a high quiz average can sometimes, perhaps often, aid a student’s final average, while a low quiz average can hurt a student’s final average. I will post the deadlines on D2L for quizzes and give you sufficient time during the week to take the quizzes. The time deadline will always be 11:30 p.m. unless I inform you specifically.

- **Written Assignments.** You will be given written assignments from the Szafran book and other assignments as directed. These are designed to help you better understand the material and to practice your data analysis skills. These are VERY IMPORTANT to your work and should not be taken lightly. Each assignment is worth 100 points. Assignments may be submitted late, but will be worth a maximum of 50 points. The due dates will be posted on D2L and indicated in class. These must be typed and submitted through the assignments tool in D2L. You may work together on these assignments, but you must submit your own work (in other words, no plagiarism). More on these in class.

- **Papers.** You will be completing two papers this semester. Complete instructions will be provided in class. These papers provide an opportunity to “do sociology,” to practice your analysis and writing skills.

- **D2L.** While I will be lecturing and working with you in class this semester, you are required to use D2L in this class. If you experience problems with the operation or function of D2L, please contact OIT Student Support. Ms. Andra Floyd in that office is a good contact person. The phone number is 936-468-1919.

### Class Attendance/Participation

**Class Attendance and Excused Absence (6.7)**

Students are expected to attend all classes, laboratories, and other activities on a regular and punctual basis. Attendance policies will be stated in the course syllabus. For those classes where attendance is a factor in the course grade, an accurate record of attendance will be maintained. Students may be excused from
attendance for reasons such as health, family emergencies, or student participation in approved university-sponsored events. However, students are responsible for notifying their instructors in advance, when possible, for excusable absences. Students missing classes, other than university-sponsored trips, may contact the Office of Student Rights and Responsibilities (OSRR) and request that an absence notification be sent to the instructor(s). The notification is not an excuse, and is not evaluated by OSRR. The notification is only provided as a courtesy to the student and the student's instructor(s). Students remain responsible for providing documentation in a timely manner to the instructor for each absence. The instructor determines whether such documentation is satisfactory. If participating in university-sponsored events, announcements in mySFA constitute official notification. Faculty members sponsoring activities that require their students to be absent from other classes must submit to the provost and vice president for academic affairs an explanation of the absence, including the date, time, and an alphabetical listing of all attending students. If approved by the provost and vice president for academic affairs, this information will be posted on mySFA. Whether absences are excused or unexcused, a student is still responsible for all course content and assignments. Students with accepted excuses may be permitted to make up work for up to three weeks of absences during a semester or one week of a summer term, depending on the nature of the missed work. Make-up work must be completed as soon as possible after returning from an absence.

**Course Policy for SOC379**

Attendance is expected at all class meetings. Class begins at 10:00 a.m. and you are expected to be on time. I will take attendance at 10:00 a.m. using a seating chart for the classroom. If you are not in your seat, I will mark you as absent. Leaving class early without prior permission will result in you being counted as absent. If you fall asleep during class or do work from other courses in my class, I will count you as absent. If you use your phone during the class session, I will count you as absent. You are allowed two absences for whatever reason. I do not need to see an excuse. After two absences, each time you are counted absent, one point will be deducted from your final class average. I accept university excuses (documented) as excused absences and that goes beyond the two free “skips” and are not counted against the student.

**Classroom Civility**

Each student is encouraged to help create a learning environment that promotes learning, dignity, and respect for one another. Students speaking at inappropriate times, taking breaks, interrupting class by coming late or leaving early, engaging in distracting behaviors, using cell phones or pagers, using head phones, playing with computers or handheld devices, or behaving aggressively toward others will be asked to leave the classroom and may be subject to disciplinary action. The professor may deem additional behaviors as inappropriate. If you have been found to be using a cell phone in class, you will be counted as absent for that day.
Evaluation of Student Performance

Grading Formula
1. Exams 50%
2. Quizzes 15%
3. Assignments 15%
4. Papers 20%

Grading Scheme
90% - 100% = A “excellent”
80% - 89% = B “good”
70% - 79% = C “average”
60% - 69% = D “poor”
00% - 59% = F “failing”

Notes on Grades
- I will post your scores on D2L only. I do not post final letter grades on D2L, but enter them directly into the university server that handles grades. I do not drop any scores. I do not offer bonus points or extra credit opportunities. Every point is important and every activity (quiz, exam, assignment) contributes to your final class average.
- One common understanding among students is that grades are based entirely on student effort, or the amount of time a student spends working on the course material, preparing for exams, etc. While the amount of time devoted to a course affects grades, we also know that some students who work hard receive poorer grades while some students can spend relatively little time on a course and earn excellent grades. In this course, you must work according to your abilities and skills. Grades, at the end of the course, are given for performance, not effort. This happens to mirror the so-called real world in terms of income—some people work really hard for little pay while others can put in relatively less effort and get huge rewards. You may work just as hard as physicians, for example, but will probably not have the earning power that they have.
- Another issue is the grade distribution. The SFA General Bulletin discusses the grade definition above such that an A grade is reserved for excellent performance, a B grade is assigned for good performance, a C is assigned as average performance, a D for poor performance, and a F grade for failing performance. This suggests that many of you (perhaps 40% to 50%) will earn a grade of C. A “C” grade is not a “bad” grade. It suggests that performance is satisfactory, but not exceptional. Social work majors need a grade of C or higher, of course, because of social work program rules. I do not give grades, but rather assign grades based on student performance.
- My job is to help you succeed in this class, to provide a suitable learning environment, to answer your questions; I am making that commitment to you. I hope that your commitment to this course and your success is appropriate. Your job is to attend class every class period, take notes on
class lectures, and put in the time necessary to learn the basics of data analysis.

Student Academic Dishonesty (4.1)
Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty
Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at: http://www.sfasu.edu/policies/academic_integrity.asp

Course Add/Drop (6.10)
Students may add courses through the second class day during the summer semesters and through the fourth class day during the fall or spring semesters. Academic unit chairs/directors will reconcile class schedules by the official reporting date. Students may drop classes through five working days past mid-semester or mid-session as applicable. A student may not drop a course after these dates, unless withdrawing from the university. The following rules apply: 1. A withdrawal or course dropped by the official reporting date will not be recorded on a student's transcript. 2. After the official reporting date, a drop or withdrawal will be noted as a "W" grade on the student's official transcript. Undergraduate students who enrolled in a Texas public institution of higher education for the first time in the fall 2007 or thereafter may not drop more than six courses with a "W" grade. This number includes any course dropped at another Texas public institution but excludes full semester withdrawals and exceptions as defined in Texas law (Education Code section 51.907). After six withdrawals, the student will receive the grade awarded for each attempted course. 3. Beginning on the sixth working day after mid-term for full semester courses or mid-session for partial semester courses, a drop will not be permitted unless the student withdraws from all courses for the term. This withdrawal will be noted on the transcript as a "WP" if the student is passing at the time or a "WF" if the student is failing at the time. 4. If a student has been found guilty of academic dishonesty, a grade of "WP" or "WH" may be changed to "WF" at the discretion of the faculty member. In the case of a grade change to "WF," the course will not count toward the six course drop limit since the student is incurring an academic penalty. 5. Approved medical withdrawals may be granted for medical conditions that prevent the student from completing the semester. Medical withdrawals are not
intended to shield a student from unsatisfactory progress. Medical withdrawal requests must be made to the Office of the Registrar within six months of the illness or incident cited in the medical withdrawal request, and will be considered by a committee comprised of the registrar and other appropriate university officials.

**Course Grades (5.5)**
At the discretion of the instructor of record and with the approval of the academic unit head, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F, except as allowed through policy [i.e., Active Military Service (6.14)]. If students register for the same course in future semesters, the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

**Academic Accommodation for Students with Disabilities (6.1)**
To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).

**Course Schedule/Timeline**

<table>
<thead>
<tr>
<th>Week Number</th>
<th>Monday Date</th>
<th>Topic</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>August 28</td>
<td>Introduction</td>
<td>• Buy Szafran Textbook and acquire SPSS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Complete honesty statement assignment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Read Chapter 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Complete Quiz 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Read Content Module 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Complete Assignment 1</td>
</tr>
<tr>
<td>2</td>
<td>September 4</td>
<td>Data Sets</td>
<td>• Read Chapter 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Read Content Module 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Complete Quiz 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Complete Assignment 2</td>
</tr>
<tr>
<td>3</td>
<td>September 11</td>
<td>Frequency Tables and Univariate Graphs; Central Tendency and Dispersion</td>
<td>• Read Chapters 3, 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Read Content Modules 3,4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Complete Quizzes 3, 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Complete Assignments 3 and 4</td>
</tr>
<tr>
<td>4</td>
<td>September 18</td>
<td>Creating New Variables</td>
<td>• Read Chapter 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Read Content Module 5</td>
</tr>
<tr>
<td>Date</td>
<td>Topic</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------</td>
<td>--------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| September 25 | EXAMINATION 1; Comparing Subgroup Means | • Complete Quiz 5  
• Prepare for Exam 1  
• Complete Assignment 5  
• Complete Paper 1 |
| October 2   | Crosstab Tables and Multivariate Graphs | • Read Chapter 7  
• Read Content Module 7  
• Complete Quiz 7  
• Complete Assignment 7 |
| October 9   | Nominal and Ordinal Measures of Association | • Read Chapter 8  
• Read Content Module 8  
• Complete Quiz 8  
• Complete Assignment 8  
• Complete Paper 2 |
| October 16  | Pearson’s Correlation and Bivariate Regression | • Read Chapter 9  
• Read Content Module 9  
• Complete Quiz 9  
• Prepare for Exam 2  
• Complete Assignment 9 |
| October 23  | Multiple Regression; EXAMINATION 2      | • Read Chapter 10  
• Read Content Module 10  
• Complete Quiz 10  
• Complete Assignment 10 |
| October 30  | Sampling Distributions and Normal Distributions | • Read Chapter 11  
• Read Content Module 11  
• Complete Quiz 11 |
| November 6  | Hypothesis Testing; One-Sample t Tests  | • Read Chapter 12  
• Read Content Module 12  
• Complete Quiz 12  
• Complete Assignment 12 |
| November 13 | Paired-Samples t Tests; Independent-Samples t Tests | • Read Chapter 13  
• Read Content Module 13  
• Complete Quiz 13  
• Complete Assignment 13 |
| November 20 | Thanksgiving Holidays (no classes)     |                                            |
| November 27 | Analysis of Variance                   | • Read Chapter 14  
• Read Content Module 14  
• Complete Quiz 14  
• Complete Assignment 14 |
| December 4  | Chi-Square Tests                       | • Read Chapter 15  
• Read Content Module 15 |
<table>
<thead>
<tr>
<th>16</th>
<th>December 11</th>
<th>FINAL EXAMINATION WEEK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• Complete Quiz 15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Complete Assignment 15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Prepare for Final Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Complete Final Exam</td>
</tr>
</tbody>
</table>

### Important University Dates This Semester

- **August 28**—First day of classes for Fall, 2017 semester
- **August 31**—Last day to add classes
- **September 15**—Last day to apply for degrees to be completed in May, 2018
- **October 18**—Mid-semester
- **October 25**—Last day to drop courses
- **October 25**—Last day to withdraw from the university without WP or WF
- **November 18**—Beginning of Thanksgiving holidays
- **November 27**—Classes resume from Thanksgiving holidays (8 a.m.)
- **November 27**—Last day to withdraw from the University
- **December 11**—FINAL EXAM WEEK
- **December 16**—COMMENCEMENT