Sociology 3379.001 - Data Analysis (CRN: 27682)
Spring, 2024 (17 Weeks; January 18 through May 10)

Professor
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E-mail: rdarville@sfasu.edu (email through D2L only)
Office Hours: Zoom and in office by appointment
Class Hours: 9:30 – 11:00 Mondays and Tuesdays; other times as indicated
Classroom: Zoom (link will be provided via email)
Assistant: Donna Matheny (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

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<thead>
<tr>
<th>Program Learning Outcome for Sociology</th>
<th>Supported Student Learning Outcome</th>
<th>Skill Level</th>
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<td>PLO7</td>
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<td>Intermediate</td>
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Time Requirements and Credit Hours Awarded for this Online Course
SOCI 3379 (3 credits; fully online) spans 17 weeks, including finals week. The course contains extensive written content that includes the same information students in a face-to-face lecture course receive, requiring students to engage the online modules for at least 10 hours per week. In addition, students are required to read approximately three chapters per week, complete three reading quizzes weekly, complete three written assignments each week, and complete three exams during the course. This work requires students to learn fundamentals of statistical analysis, how to perform statistical analysis using SPSS, how to understand and interpret data analysis results, and how to write statistical analysis reports.

Course Materials
- IBM SPSS Statistics 29. You will be using SPSS throughout the semester beginning with week 2. You may purchase (rent) this program for home use and/or use the program at the library computer labs (LINC). More information will be provided.
- Hand-held calculator
• Microsoft Word or compatible word processing program
• Internet Browser (Chrome preferred)

Course Requirements

• Examinations. There will be three 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 via Zoom, 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. Many 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 35 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 10 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. I will not accept late work. If you have reasonable doubt that you cannot maintain the pace of this course, you should strongly consider withdrawing from this course now and registering for the course for another semester. 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 one longer paper this semester. Complete instructions will be provided in class. This paper provides an opportunity to practice your data analysis skills and your report writing skills while using a national data file from a recent national social survey. Due date TBD.

- **D2L.** While I will be lecturing and working with you in class this semester via D2L in this class. If you have little or no experience using D2L, I strongly recommend that you go through the information and tutorials associated with D2L. If you experience problems with the operation or function of D2L, please contact OIT Student Support. Their phone number is 936-468-1919 and their offices are located on the second floor of the Steen Library.

**Class Attendance/Participation**

**Institution Absences** *(HOP 04-110)*

An Institutional Absence may be granted to a student who participates as a representative of the University in academic (including research), extra- or cocurricular, or athletic activities. Students will be excused for institutional purposes from otherwise required academic activity only when a valid Institutional Absence is approved by the appropriate administrative unit or official and the documentation of approval is provided to the faculty member at least five (5) days in advance.

Institutional absences will not be approved for keystone events, defined as: a special or unique assignment, test, project, experience, or other academic exercise identified by the Faculty member as critical for successful completion of standards of the class and unable to be missed. These events must be identified on the syllabus at the beginning of the semester and communicated to the students. Events added to the syllabus at a later date will not qualify for Keystone Event status. Keystone Events where the date/time is changed will no longer be considered a Keystone Event. Students should make themselves aware of any Keystone Events identified in the syllabus to ensure there are no conflicts.

For keystone events where the assignment dates vary, it is incumbent upon the students to work with their faculty member to not select a conflicting date.

More information on Institutional Absences, including how to apply, can be found at [https://www.sfasu.edu/deanofstudents/student-resources/institutional-absences](https://www.sfasu.edu/deanofstudents/student-resources/institutional-absences).

**Course Policy for SOCI 3379**

Attendance is expected at all class meetings. Because this is an online only course, we are not scheduled for any face-to-face class meetings. However, I will hold online class sessions using Zoom (livestream). If you cannot or do not attend the live sessions, you must watch the session using Zoom recordings. During the sessions, I will lecture on the course material, help with assignments, quizzes, and exams as well as answer student questions. You are being held responsible for all material covered during these sessions. Session recordings will be posted by date of original session and will remain in D2L throughout the course. You may watch each session multiple times if desired.
**Academic Integrity HOP policy 04-106**
The Code of Student Conduct and Academic Integrity outlines the prohibited conduct by any student enrolled in a course at SFA. It is the responsibility of all members of all faculty, staff, and students to adhere to and uphold this policy. Articles IV, VI, and VII of the new Code of Student Conduct and Academic Integrity outline the violations and procedures concerning academic conduct, including cheating, plagiarism, collusion, and misrepresentation. Cheating includes, but is not limited to: (1) Copying from the test paper (or other assignment) of another student, (2) Possession and/or use during a test of materials that are not authorized by the person giving the test, (3) Using, obtaining, or attempting to obtain by any means the whole or any part of a non-administered test, test key, homework solution, or computer program, or using a test that has been administered in prior classes or semesters without permission of the Faculty member, (4) Substituting for another person, or permitting another person to substitute for one’s self, to take a test, (5) Falsifying research data, laboratory reports, and/or other records or academic work offered for credit, (6) Using any sort of unauthorized resources or technology in completion of educational activities.

Plagiarism is the appropriation of material that is attributable in whole or in part to another source or the use of one’s own previous work in another context without citing that it was used previously, without any indication of the original source, including words, ideas, illustrations, structure, computer code, and other expression or media, and presenting that material as one’s own academic work being offered for credit or in conjunction with a program course or degree requirements.

Collusion is the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any provision of the rules on academic dishonesty, including disclosing and/or distributing the contents of an exam.

Misrepresentation is providing false grades or résumés; providing false or misleading information in an effort to receive a postponement or an extension on a test, quiz, or other assignment for the purpose of obtaining an academic or financial benefit for oneself or another individual or to injure another student academically or financially.

**Students with Disabilities**
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 promptly may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).
Student Wellness and Well-Being
SFA values students' overall well-being, mental health and the role it plays in academic and overall student success. Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressure and challenges associated with relationships, emotional well-being, alcohol and other drugs, identities, finances, etc.

If you are experiencing concerns, seeking help, SFA provides a variety of resources to support students’ mental health and wellness. Many of these resources are free, and all of them are confidential.

On-campus Resources:
The Dean of Students Office (Rusk Building, 3rd floor lobby)
www.sfasu.edu/deanofstudents
936.468.7249
dos@sfasu.edu

SFA Human Services Counseling Clinic Human Services, Room 202
www.sfasu.edu/humanservices/139.asp
936.468.1041

The Health and Wellness Hub “The Hub”
Location: corner of E. College and Raguet St.

To support the health and well-being of every Lumberjack, the Health and Wellness Hub offers comprehensive services that treat the whole person – mind, body and spirit. Services include:
• Health Services
• Counseling Services
• Student Outreach and Support
• Food Pantry
• Wellness Coaching
• Alcohol and Other Drug Education
www.sfasu.edu/thehub
936.468.4008
thehub@sfasu.edu

Crisis Resources:
• Burke 24-hour crisis line: 1.800.392.8343
• National Suicide Crisis Prevention: 9-8-8
• Suicide Prevention Lifeline: 1.800.273.TALK (8255)
• Crisis Text Line: Text HELLO to 741-741

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 headphones, 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 10%
3. Assignments 25%
4. Paper 15%

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 in 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.

**Adding and Dropping Courses (04-103)**
See policy at: [https://www.sfasu.edu/docs/hops/04-103.pdf](https://www.sfasu.edu/docs/hops/04-103.pdf)

**Course Grades (02-206)**
See policy at [https://www.sfasu.edu/docs/hops/02-206.pdf](https://www.sfasu.edu/docs/hops/02-206.pdf)

### Brief Course Schedule for SOCI 3379, Data Analysis

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<th>Week No.</th>
<th>Date</th>
<th>Topic</th>
<th>Assignment</th>
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| 1        | January 15 (Monday) January 18 (Thursday) | • Introduction                           | • First Class Day  
• Buy Szafran Textbook and acquire SPSS  
• Complete honesty statement assignment  
• Read and study Chapter 1  
• Complete Quiz 1  
• Read Content Module 1  
• Complete Assignment 1 |
| 2        | January 22 | • Data Sets                               | • Read and study Chapter 2  
• Read Content Module 2  
• Complete Quiz 2  
• Complete Assignment 2 |
| 3        | January 29 | • Frequency Tables and Univariate Graphs  
• Central Tendency and Dispersion | • Read and study Chapter 3, 4  
• Read and study Content Module 3, 4  
• Complete Quiz 3, 4  
• Complete Assignment 3, 4 |
| 4        | February 5 | • Creating New Variables                  | • Read and study Chapter 5  
• Read and study Content Module 5  
• Complete Quiz 5  
• Complete Assignment 5 |
| 5        | February 12 | • EXAM 1                                | • COMPLETE EXAMINATION 1 (1-5) |
| 6        | February 19 | • Comparing Group Means                  | • Read and study Chapter 6  
• Read and study Content Module 6  
• Complete Quiz 6  
• Complete Assignment 6 |
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<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Tasks</th>
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<tr>
<td>7</td>
<td>February 26</td>
<td>• Crosstab Tables</td>
<td>• Read and study Chapters 7</td>
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<td>• Read and study Content Module 7</td>
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<td>• Complete Quizzes 7</td>
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<td>• Complete Assignments 7</td>
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<td>8</td>
<td>March 4</td>
<td>• Nominal and Ordinal Measures of Association</td>
<td>• Read and study Chapter 8</td>
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<td>• Read and study Content Module 8</td>
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<td>• Complete Quiz 8</td>
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<td>• Complete Assignment 8</td>
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<td>9</td>
<td>March 11</td>
<td>• SPRING BREAK</td>
<td>• Rest and Relaxation</td>
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<td>10</td>
<td>March 18</td>
<td>• Pearson’s Correlation and Bivariate Regression</td>
<td>• Read and study Chapter 9</td>
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<td>• Read and study Content Module 9</td>
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<td>• Complete Quiz 9</td>
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<td>• Complete Assignment 9</td>
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<td>11</td>
<td>March 25</td>
<td>• Multiple Regression</td>
<td>• Read and study Chapter 10</td>
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<td>• Read and study Content Module 10</td>
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<td>• Complete Quiz 10</td>
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<td>• Complete Assignment 10</td>
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<td>12</td>
<td>April 1</td>
<td>• EXAM 2</td>
<td>• COMPLETE EXAMINATION 2 (6-10)</td>
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<td><strong>Unit 3: Inferential Statistics</strong></td>
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<td>13</td>
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<td>• Sampling Distributions and Normal Distributions</td>
<td>• Read and study Chapter 11, 12</td>
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<td>• Hypotheses Testing and One-Sample t Tests</td>
<td>• Read and study Content Module 11, 12</td>
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<td>• Complete Quiz 11, 12</td>
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<td>14</td>
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<td>• Paired- and Independent- Samples t Tests</td>
<td>• Read and study Chapter 13</td>
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<td>• Complete Quiz 13</td>
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<td>• Complete Assignment 13</td>
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<td>15</td>
<td>April 22</td>
<td>• Analysis of Variance</td>
<td>• Read and study Chapter 14</td>
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<td>• Read and study Content Module 14</td>
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<td>• Complete Assignment 14</td>
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<td>16</td>
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<td>• Chi-Square</td>
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<td>• Read and study Content Module 15</td>
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<tr>
<td>17</td>
<td>May 6</td>
<td>• FINAL EXAM</td>
<td>• COMPLETE FINAL EXAMINATION (11-15)</td>
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