CRIJ 4342 Research and Analysis Applications

Fall 2023

Dr. George J. Day

Associate Professor of Criminal Justice; Department of Government

Office: LAN Room 133  
Office Phone: (936) 468-3948  
email: daygj@sfasu.edu

Class Hours & Location: Ferguson Liberal Arts 377 / TTh @ 9:30 a.m. - 10:45 p.m.
Zoom link for the virtual classroom: https://sfasu.zoom.us/j/94889574613?pwd=TnRPWDF6dStp3R0SVJGM1pUdJJiZz09

Office Hours:
- Mondays - Thursdays: 1:30 p.m. – 3:30 p.m.
- Friday: by appointment only

Office hours are available face-to-face or by Zoom at the following link: https://sfasu.zoom.us/j/92445418870?pwd=aXVnOCtwZ2Y4Z1JBXhBTmk0ZEZLUT09

When logging into the Zoom meeting, you may be placed in a virtual waiting room if I meet with another student. I will be notified that you are waiting and will admit you when it is your turn to meet with me.

“Study hall” I will host a ‘study hall’ time each Friday from 1:00 pm to 2:30 pm in the conference room in Liberal Arts North (LAN 128). Students are invited to bring their laptops and work on their homework. Then if you need help, just come down to my office and get me!

Required software:
This course requires the use of a statistical package called Stata rather than a textbook. A 6-month student license for Stata/IC is available for $48 at: https://www.stata.com/order/new/edu/gradplans/student-pricing/

All students are required to have a copy of Stata in order to complete the required assignments for the course. Note that you will need a computer or laptop that runs Windows or Apple IOS to run Stata. Chromebooks and similar devices are not compatible with Stata. If you do not have a computer that will run Stata, there are instructions on Brightspace for how to access the program remotely through the library computers.

Course Protection and Intellectual Property
My personal work contained in this syllabus, the course calendar, and all handouts and assignments created by me are my intellectual property and are protected by law. You do not have the authorization to duplicate any part of the work without my permission.

Course Description:
Students taking this course will learn how to apply statistical techniques to program evaluation and other research applications in criminal justice. The course applies skills learned in MATH 1342 to research in criminal justice using Stata. Prerequisites: MATH 1342.

1 There will be no office hours on Sept. 13, Oct. 11, and Nov. 8 due to my responsibilities as a member of the Faculty Senate.
2 When logging into the Zoom meeting, you may be placed in a virtual waiting room if I meet with another student. I will be notified that you are waiting and will admit you when it is your turn to meet with me.
Course Contact Hours and Study Hours
CRIJ 4342 Research and Analysis Application (3 credits) 4342 is an upper-level course that meets either two or three times each week for a total of 150 minutes weekly for 15 weeks. Class sessions include a combination of lecture and practical demonstration of statistical analysis. Students will complete weekly data analysis assignments using STATA as assigned. Students will complete weekly quizzes and practical skill assignments designed to evaluate understanding of the material and provide students with hands-on experience with statistical analysis. Students will spend an average of six hours each week in the completion of assigned work and preparation for in-class sessions.

Program Learning Objectives:

- Students will demonstrate critical thinking and analytic skills appropriate to the criminal justice practice and scholarship.
- Students will demonstrate effective and efficient oral and written communication skills appropriate to social scientists and criminal justice professionals

Student Learning Objectives: By completing this course, students should be able to:

- Be able to examine data to determine suitability for analysis and identify the appropriate statistical technique for analysis.
- Be proficient in using Stata to conduct and interpret univariate and multivariate statistical analyses.
- Be proficient in documenting the results of statistical data analysis for professional presentation and publication.

Course Engagement (formerly “attendance”) Policy:
This class utilizes a HyFlex modality which means that students have the freedom to choose how they wish to engage or interact with the course throughout the semester. Furthermore, students can change how they interact with the course at any time. See the “Required Course Work” section of the syllabus to learn more about my expectations for student engagement with the course.

Students taking a HyFlex class are expected to manage their schedules and decide which means of engaging or interacting with the course best fits their learning style and personal schedules. Students will have been considered to have “attended” class at least once for financial aid purposes if they have, during the first 12 class days, either (a) attended at least one class session f2f or via video conference (Zoom) or (b) submitted at least one assignment/quiz or participated in at least one online discussion.

Grading Policy
Final course grades will be assessed on the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>“A”</td>
<td>90-100%</td>
<td>Exam average</td>
<td>40% of grade</td>
</tr>
<tr>
<td>“B”</td>
<td>80-89%</td>
<td>Quiz average</td>
<td>20% of grade</td>
</tr>
<tr>
<td>“C”</td>
<td>70-79%</td>
<td>Homework average</td>
<td>40% of grade</td>
</tr>
<tr>
<td>“D”</td>
<td>60-69%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“F”</td>
<td>0-59%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Required Course Work:
- **Assignments:** Unless otherwise specified in the course schedule, students will be assigned two assignments each week designed to reinforce classroom instruction. Assignments are designed to evaluate student understanding of the material and correct misunderstandings prior to exams.
Students are permitted to work together to complete homework assignments and are welcome to bring their laptops to the professor’s office and complete their homework there during scheduled office and help desk hours (see pg. 1).

**Quizzes:** Each unit includes a short quiz based on the lecture material and is designed to evaluate students’ understanding of course concepts. Quizzes do not have a time limit and may be taken twice. The second attempt will only include questions answered incorrectly on the first attempt.

**Exams:** There will be four exams, one following each section of the course. Exams will be facilitated through Brightspace and require students to demonstrate mastery of data analysis techniques and their ability to present analysis results. The fourth, and final, exam, will be comprehensive. Exams are to be taken individually and *collaboration between students on exams is prohibited.*

**Incomplete course work:** The submission of assignments or exams after they are due *will not be permitted without approval* obtained from the instructor based on extenuating circumstances. Extenuating circumstances include, but are not limited to: military deployment, religious holidays/observances, court appearances, jury duty, family emergencies, personal or immediate family illness, or participation in student athletics or other university-approved activity.

Please note the following course policies regarding coursework missed as a result of absences:

- Student-athletes are expected to be aware of their team’s travel schedule and plan their activities accordingly. Because course material and required coursework are available to all students over the entirety of each unit, student-athletes are expected to complete all tasks on time. *Extensions due to athletic travel will not be granted unless that travel involves more than 1/3 of the allotted number of days for a particular unit.* This policy also applies to all other student clubs, organizations, and other university-sponsored travel.

- Students who miss assignments for reasons other than athletics or other university-approved activities will need to *provide acceptable documentation of the absence.* Acceptable documentation includes but is not limited to notices from doctors/medical providers on official stationery that include the date(s) of illness; published obituaries that include the date of funeral services; a copy of military orders; or a copy of jury duty summons or other judicial document supporting a court appearance. If you become ill, visit a medical professional and obtain a work excuse (many doctors and physician assistances will ask you if you need one, the correct answer is “yes”)

**Conduct:** Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn and participate in the course. Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic, or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/ inappropriate in the classroom. Students who do not attend class regularly or perform poorly on class projects/exams may be referred to the Early Alert Program.

---

3 Immediate family is defined for this purpose as a student’s parent or grandparents (by blood or marriage), spouses, children, siblings.

4 Note that documentation related to medical or mental health issues do not need to provide details of specific diagnoses (in fact, I would prefer that they do not), they need mere need to verify that you are or were under a doctor’s care and the dates of the absence.

5 I operate under a principle of “trust but verify”; a good philosophy to adopt when you work in the criminal justice field.
Rules of the Classroom

- While the 1st Amendment to the U.S. Constitution protects each individual’s freedom of expression, freedom of speech is NOT an absolute right. Students who express themselves in a way that belittles, insults, bullies, or otherwise attempts to make another person feel like they are less human than another will be held accountable for their inappropriate conduct. There will be consequences for being a bully, insulting or belittling another, or being mean and hateful. Students violating this policy will be given one opportunity to apologize publicly. Those that refuse to apologize or continue to disrespect, bully, or harass others in the class will be removed from the course with a grade of F.

- Grades are not given; they are earned. I do not offer or entertain requests for extra credit. I do not round grades. Do not ask; you may assume the answer will be “no.”

- The tentative class schedule is a general guide. Coverage of the material may be accelerated, decelerated, rearranged, augmented, diminished, or otherwise modified when the professor believes such change would be to the benefit of the class.

This syllabus will act as the final word in the event of a discrepancy, error, or misunderstanding. Make sure you read and understand it completely—and make sure you keep a copy for reference during the semester.

Academic Integrity

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

---

6 A proper apology includes (at a minimum), (1) a recognition of the harmful act and the harm caused by that act and (2) a commitment to not repeat the harmful behavior in the future. ‘Apologies’ that are used as microaggressions are unacceptable.
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.

Academic Integrity and the Use of AI
All submitted work, including assignments, papers, discussion posts, and exams, must be the original work of the individual student unless explicitly stated otherwise. The use of AI technology, such as ChatGPT, is not permitted (see Policy Number 10.4, Article VI [vi]). While AI can be a useful and helpful tool, it is not an acceptable substitute for real scholarship. The consequence of the submission of AI-generated material in this course will be dismissal from the course with a grade of “F.”

Academic Integrity and Background Investigations
Students who wish to work for a state or federal criminal justice agency should keep in mind that background investigators frequently talk to people who know an applicant but are not on that applicant’s reference list (such as professors). If I determine that a student has violated this academic integrity policy and that determination is confirmed through a due process hearing conducted by the Dean of Student Affairs, that student’s lack of integrity will be the first thing I tell an investigator about them.

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/.

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
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

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)
- johCrisis Text Line: Text HELLO to 741-741

Withheld Grades Policy:
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the coursework 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. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course to compute the grade point average. For additional information, go to https://www.sfasu.edu/policies/course-grades-5.5.pdf.
## Class Schedule – subject to change at the instructor’s discretion

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Required Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit 1</strong></td>
<td><strong>Aug. 28-Sept. 1</strong></td>
<td><strong>Introduction to Stata</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Unit 1 Quiz (Sept. 1)</strong></td>
<td><strong>Unit 1 Homework (Sept. 4)</strong></td>
</tr>
<tr>
<td><strong>Unit 2</strong></td>
<td><strong>Sept. 4-8</strong></td>
<td><strong>Working with commands, do-files, and results</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Unit 2 Quiz (Sept. 8)</strong></td>
<td><strong>Unit 2 Homework (Sept. 11)</strong></td>
</tr>
<tr>
<td><strong>Unit 3</strong></td>
<td><strong>Sept. 11-15</strong></td>
<td><strong>Preparing data for analysis</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Unit 3 Quiz (Sept. 11)</strong></td>
<td><strong>Unit 3 Homework (Sept. 18)</strong></td>
</tr>
<tr>
<td><strong>Sept. 19</strong></td>
<td><strong>Sept. 20-22</strong></td>
<td><strong>Review day</strong></td>
</tr>
<tr>
<td><strong>Exam #1</strong></td>
<td><strong>Exam #1 (Sept. 22)</strong></td>
<td><strong>Exam #1 (Sept. 22)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Unit 4 Quiz (Sept. 29)</strong></td>
<td><strong>Unit 4 Homework (Oct. 2)</strong></td>
</tr>
<tr>
<td><strong>Unit 5</strong></td>
<td><strong>Oct. 2-6</strong></td>
<td><strong>Hypothesis testing 101</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Unit 5 Quiz (Oct. 6)</strong></td>
<td><strong>Unit 5 Homework (Oct. 9)</strong></td>
</tr>
<tr>
<td><strong>Unit 6</strong></td>
<td><strong>Oct. 9-13</strong></td>
<td><strong>One &amp; two-sample tests of proportion and t-tests</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Unit 6 Quiz (Oct. 13)</strong></td>
<td><strong>Unit 6 Homework (Oct. 16)</strong></td>
</tr>
<tr>
<td><strong>Oct. 17</strong></td>
<td><strong>Oct. 18-20</strong></td>
<td><strong>Review Day</strong></td>
</tr>
<tr>
<td><strong>Exam #2</strong></td>
<td><strong>Exam #2 (Oct. 20)</strong></td>
<td><strong>Exam #2 (Oct. 20)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Unit 7 Quiz (Oct. 27)</strong></td>
<td><strong>Unit 7 Homework (Oct. 30)</strong></td>
</tr>
<tr>
<td><strong>Unit 8</strong></td>
<td><strong>Oct. 23-27</strong></td>
<td><strong>ANOVA</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Unit 8 Quiz (Nov. 3)</strong></td>
<td><strong>Unit 8 Homework (Nov. 6)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Unit 8 Homework (Nov. 6)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Unit 9</strong></td>
<td><strong>Nov. 6-10</strong></td>
<td><strong>Bivariate Correlation &amp; Regression</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Multiple Regression &amp; Regression Diagnostics</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Unit 9 Quiz (Nov. 10)</strong></td>
<td><strong>Unit 9 Homework (Nov. 13)</strong></td>
</tr>
<tr>
<td><strong>Nov. 14</strong></td>
<td><strong>Nov. 15-17</strong></td>
<td><strong>Review Day</strong></td>
</tr>
<tr>
<td><strong>Exam #3</strong></td>
<td><strong>Exam #3 (Nov. 17)</strong></td>
<td><strong>Exam #3 (Nov. 17)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Unit 10 Quiz (Dec. 1)</strong></td>
<td><strong>Unit 10 Homework (Dec. 4)</strong></td>
</tr>
<tr>
<td><strong>Unit 10</strong></td>
<td><strong>Nov. 27-Dec. 1</strong></td>
<td><strong>Logistic Regression</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Unit 10 Homework (Dec. 4)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Unit 11</strong></td>
<td><strong>Dec. 4-8</strong></td>
<td><strong>Factor Analysis</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Unit 11 Quiz (Dec. 8)</strong></td>
<td><strong>Unit 11 Homework (Dec. 11)</strong></td>
</tr>
<tr>
<td><strong>Dec. 12-14</strong></td>
<td><strong>FINAL EXAM!</strong></td>
<td><strong>Final exam due at 5:00 pm on Dec. 14</strong></td>
</tr>
</tbody>
</table>