

Statistics for Criminology

CRIM 4380 3 Credits Fall 2024

Instructor: Dr. Danielle Fenimore

Office: CAB 351-D Phone: 210-784-1000

Office Hours: M: 12:00 to 3:00

MW: 2:00 to 3:00

Email: dfenimore@tamusa.edu Classroom: Classroom Hall 110

Meeting Time: MW 3:30pm to 4:45pm

Course Description:

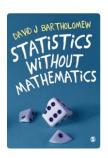
This course will explore the theory and central concepts of statistical inferential techniques, which a specific emphasis on interpretation of statistics for application to practical scenarios. Descriptive and inferential techniques with a focus on criminology and criminal justice issues will be emphasized. Basic concepts include interpreting results, and choosing appropriate statistical techniques for specific research questions.

Course Learning Objectives:

By the end of the course, students will be able to:

- 1. Describe concepts central to inferential statistics.
- 2. Interpret statistical data relevant to criminological research.
- 3. Apply statistical understanding to evaluate crime trends and patterns.
- 4. Critically assess the validity and reliability of statistical findings in criminology.
- 5. Communicate statistical results effectively in written and oral formats.

Course Materials:



Title: Statistics without Mathematics

Author: David J. Bartholomew **Publisher:** SAGE Publishing **ISBN:** 9781473934320

Assignments & Learning Activities

- 1. <u>Syllabus Quiz</u>: There will be a syllabus quiz due by the end of the day on the second Tuesday of the semester. This quiz will consist of 5 multiple choice questions and will be available on Blackboard from the first day of class to 11:59 PM on Tuesday, September 3.
- 2. Exams: There will be 2 exams over the course of the semester. Given the nature of the course, the exams will be applied, and will consist of five essay questions. Exam 1 will include all material up until the exam is given; Exam 2 will include material from after Exam 1 through the end of the semester. Students will have a list of possible essay questions two weeks before the exam to prepare for the exam, and five questions from that list will be selected at random that you will be required to answer. You may have a single cheat sheet to bring to class on the day of the exam; you may not write the essays before hand and copy them down to submit for credit.
- 3. <u>Reading Quizzes:</u> You will have 5 random reading quizzes. This material is continuously building on itself and requires students to be prepared to discuss it when coming to class. To ensure that readings are completed, at least somewhat, you will have 5 reading quizzes during the semester.
- 4. <u>In-Class Assignments:</u> You will have several in-class assignments that will help emphasize the material that we have read about or that you have received a lecture on. Most of your inclass activities will be discussion-based. As this is a small class, you will need to participate beyond saying "I agree." Part of this course is designed to expand and continue developing critical thinking skills, and as such you will be expected to consider *why* you agree. Think of this as "showing your work" in math courses. I will drop your two lowest grades.
- 5. <u>Final Group Presentation:</u> The goal of the final presentation is to apply what you have learned in this course and develop your presentation skills. The final presentation will be done in pairs (and one group of three) that I will assign. Your presentation should be no longer than 7 minutes and you will be asked to have at least 3 peer-reviewed sources. This assignment will be broken up into three parts:
 - a. Presentation topic you and your partner will jointly submit a proposed topic (5%);
 - b. Annotated Bibliography you will identify 5 peer-reviewed sources relevant to your topic and describe why they are useful to your presentation (5%);
 - c. Final presentation (10%)

Grading Information:

The method for submission of each assignment will be made available to each student through either oral instruction, a written set of instructions, or a rubric for an assignment. I anticipate grading and returning assignments within two weeks of their submission.

If you have questions about a grade on any assignment, quiz, or examination, you will have ONE WEEK after the grade is posted to come to be with questions about the grade. After that week, you grade will stand as is (even if you did not check your grade in the week-long time period). Should you raise serious concerns about how a learning activity was graded, I reserve the right to regrade the whole assignment.

I recommend drafting any initial reaction emails after a grade is posted; sending your initial response is reactionary, but waiting at least 24 hours will allow you sufficient time to process. If you choose to email immediately, be sure to use professional language in your email.

I may or may not round the final grades. Extra credit will ALWAYS be announced; do not ask for extra credit at any point during the semester. It will not be given. Rounding is also inherently unfair; be sure to do your best work on each assignment and ask for help when you need it to prevent panic at the end of the semester.

I will not speak with parents about grades or assignments, unless the proper procedures have been followed to permit me to do so. As a college student, you are adults and capable of managing your own academic affairs. However, if you are unsure about how to handle a particular academic situation, be sure to ask. I am happy to discuss navigating university policies or questions about your grades via email or during office hours.

Graded Activities and their Values		
Syllabus Quiz	5%	
Exam 1	25%	
Exam 2	25%	
Reading quizzes	5%	
In-Class Activities	20%	
Final Presentation	20%	

Final Grading Scale:

Texas A&M, San Antonio uses a five-point scale to submit final grades:

Grade	Point Value
A	90-100
В	80-89
C	70-79
D	60-69
F	60 or below

Course Policies

Attendance: Attendance for my courses is not mandatory, though students are always expected to attend all scheduled activities for the courses in which they are registered. However, it is important to note that with the size of the class this semester, your absence will be extremely obvious. This material, even though you are not learning much of the math, will always build on previous information. As such, you will not be able to pass this course without coming to class.

As far as university policies are concerned, the professor of any course may drop students for non-attendance before the published drop deadline, resulting in a non-punitive grade for the student. If you are called to active military duty at any time, and this is not to exceed 25% of the total number of class meetings, you will be excused from attending class. You will be permitted to complete

assignments or exams as needed within a reasonable amount of time after your absence. For a full break down of allowable absences, please see the university course catalogue where these are detailed in full.

Make-up and Late Work Policy: If you miss an assignment submission deadline because of participation in a university-sanction activity, arrangements to make-up missed work can be made by contacting me. However, this will require documentation. This will include, but is not limited to, providing a letter with your orders for military services, or a doctor's note if you are ill. If you experience any technical difficulties prohibiting you from completing assignments, you must document this issue via screenshot.

<u>Life Happens Pass:</u> Life happens regardless of our plans. To recognize this, you will be granted one "Life Happens" pass in which you will be able to submit an assignment or sit for an exam up to two weeks after they are due. Please send me an email with the subject line "Life Happens" within two days of the assignment's deadline, unless there are extenuating circumstances, and have the body of your email only consist of the assignment or exam in question, and we will work out a plan together on how to get your work submitted.

I have the Life Happens pass to allow for things that are completely out of your control, but you are responsible for keeping track of the work that is not part of your Life Happens pass. You will otherwise be expected to maintain the pace of the course.

All assignments are to be submitted on the date they are due. In case of planned excused absences late work will ONLY be accepted by an alternate due date that is previously agreed upon by the student and the instructor. Late work will not be otherwise accepted.

Electronics: You may use a laptop or tablet to take notes, but if either of these become a distraction to you or another student, you may be asked to find an alternative form to take notes. Phones are generally prohibited, though I will allow you to take pictures of PowerPoint slides if you need to. Electronics will be prohibited during exams. If you are found to be in violation of this policy you will receive a zero (0).

University Policies & Resources

Academic Accommodations for Persons with Disabilities: Texas A&M University-San Antonio is committed to providing all students with reasonable access to learning opportunities and accommodations in accordance with The Americans with Disabilities Act, as amended, and Section 504 of the Rehabilitation Act. If you experience barriers to your education due to a disability or think you may have a disability, please contact Disability Support Services in the Central Academic Building, Suite 210, or at (210) 784-1335 or visit https://www.tamusa.edu/index.html or email us at dss@tamusa.edu. Disabilities may include, but are not limited to, attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability-related needs with Disability Support Services and their instructors as soon as possible.

<u>Academic Learning Center:</u> The Academic Learning Center provides free course-based tutoring to all currently enrolled students at Texas A&M University-San Antonio. Students wishing to work with a tutor can make appointments through the Brainfuse online tutoring platform. Brainfuse can

be accessed in the *Tools* section of Blackboard. You can contact the Academic Learning Center by emailing <u>tutoring@tamusa.edu</u>, calling (210) 784-1307, or visiting the Central Academic Building, room 202.

<u>Counseling/Mental Health Resources:</u> As a college student, there may be times when personal stressors interfere with your academic performance and/or negatively impact your daily functioning. If you are experiencing emotional difficulties or mental health concerns, support is available to you through the Student Counseling Center (SCC). To schedule an appointment call 210-784-1331 or visit Modular C, Room 166 (Rear entrance).

All mental health services provided by the SCC are free and confidential (as the law allows). The Student Counseling Center provides brief individual and group therapy, crisis intervention, consultation, case management, and prevention services.

Crisis support is available 24/7 by calling the SCC at 210-784-1331 (after-hours select option '2'). For more information and self-help resources, please visit www.tamusa.edu/studentcounseling

<u>Emergency Preparedness:</u> JagE Alert is Texas A&M University-San Antonio's mass notification. In the event of an emergency, such as inclement weather, students, staff and faculty, who are registered, will have the option to receive a text message, email with instructions and updates. To register or update your information visit: https://tamusa.bbcportal.com/.

More information about Emergency Operations Plan and the Emergency Action Plan can be found here: https://www.tamusa.edu/about-department/documents/emergency-operations-plan.pdf and https://www.tamusa.edu/about-us/campus-information/safety/university-police-department/documents/emergency-action-plan.pdf

Download the SafeZone App for emergencies or call (210) 784-1911. Non-Emergency (210) 784-1900

Financial Aid and Verification of Attendance: According to the following federal regulation, 34 CFR 668.21: U.S. Department of Education (DoE) Title IV regulation, a student can only receive Title IV funds based on Title IV eligibility criteria which include class attendance. If Title IV funds are disbursed to ineligible students (including students who fail to begin attendance), the institution must return these funds to the U.S. DoE within 30 days of becoming aware that the student will not or has not begun attendance. Faculty will provide the Office of Financial Aid with an electronic notification if a student has not attended the first week of class. Any student receiving federal financial aid who does not attend the first week of class will have their aid terminated and returned to the DoE. Please note that any student who stops attending at any time during the semester may also need to return a portion of their federal aid.

<u>Writing, Language, and Digital Composing Center:</u> The Writing, Language, and Digital Composing Center supports graduate and undergraduate students in all three colleges as well as faculty and

staff. Tutors work with students to develop reading skills, prepare oral presentations, and plan, draft, and revise their written assignments. Our language tutors support students enrolled in Spanish courses and students composing in Spanish for any assignment. Our digital studio tutors support students working on digital projects such as eportfolios, class presentations, or other digital multimedia projects. Students can schedule appointments through JagWire under the Student Services tab. Click on "Writing, Language, and Digital Composing Center" to make your appointment. The Center offers face-to-face, synchronous online, and asynchronous digital appointments. More information about what services we offer, how to make an appointment, and how to access your appointment can be found on our website at https://bit.ly/WLDCCenter.

<u>Meeting Basic Needs:</u> Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Dean of Students (DOS@tamusa.edu) for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to provide any resources they may possess.

<u>Military Affairs:</u> Veterans and active-duty military personnel are welcomed and encouraged to communicate, in advance if possible, and special circumstances (e.g., upcoming deployment, drill requirements, disability accommodations). You are also encouraged to visit the Patriots' Casa inperson room 202, or to contact the Office of Military Affairs with any questions at military.va@tamusa.edu or (210)784-1397.

Religious Observances: Texas A&M University-San Antonio recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes for regular session classes.

<u>The Six-Drop Rule:</u> Students are subject to the requirements of Senate Bill (SB) 1231 passed by the Texas Legislature in 2007. SB 1231 limits students to a maximum of six (6) non-punitive course drops (i.e., courses a student chooses to drop) during their undergraduate careers. A non-punitive drop does not affect the student's GPA. However, course drops that exceed the maximum allowed by SB 1231 will be treated as "F" grades and will impact the student's GPA.

Statement of Harassment and Discrimination: Texas A&M University-San Antonio is committed to the fundamental principles of academic freedom, equality of opportunity and human dignity. To fulfill its multiple missions as an institution of higher learning, A&M-San Antonio encourages a climate that values and nurtures collegiality and the uniqueness of the individual within our state, nation, and world. All decisions and actions involving students and employees should be based on applicable law and individual merit. Texas A&M University-San Antonio, in accordance with applicable federal and state law, prohibits discrimination, including harassment, on the basis of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation, gender identity, gender expression, or pregnancy/parenting status. Individuals who

believe they have experienced harassment or discrimination prohibited by this statement are encouraged to contact the appropriate offices within their respective units.

Title IX Compliance: Texas A&M University-San Antonio faculty are committed to providing a safe learning environment for all students and for the university as a whole. If you have experienced any form of sex- or gender-based discrimination or harassment, including sexual assault, sexual harassment, domestic or dating violence, or stalking, know that help and support are available. A&M-San Antonio's Title IX Coordinator can support those impacted by such conduct in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, and more. The university strongly encourages all students to report any such incidents to the Title IX Coordinator. Please be aware that all A&M-San Antonio employees (other than those designated as confidential resources such as counselors and trained victim advocates) are required to report information about such discrimination and harassment to the university. This means that if you tell a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the university's Title IX Coordinator (titleix@tamusa.edu, 210-784-2061, CAB 439K). If you wish to speak to a confidential employee who does not have this reporting requirement, you can contact the Student Counseling Center at (210) 784-1331 or visit them in Madla 120.

Pregnant/Parenting Students: Texas A&M-San Antonio does not require a pregnant or parenting student, solely because of that status or issues related to that status, to (1) take a leave of absence or withdraw from their degree or certificate program; (2) limit the student's studies; (3) participate in an alternative program; (4) change the student's major, degree, or certificate program; or (5) refrain from joining or cease participating in any course, activity, or program at the University. The university will provide reasonable accommodations to pregnant students that would be provided to a student with a temporary medical condition and that are related to the health and safety of the student and the student's unborn child. These could include maintaining a safe distance from substances, areas, and activities known to be hazardous to pregnant individuals and their unborn child; excused absences because of illness or medical appointments; modified due dates for assignments; rescheduled tests/exams; taking a leave of absence; and being provided access to instructional materials and video recordings of lectures for excused absences, if these would be provided to any other student with an excused absence. Pregnant/parenting students are encouraged to contact the Title IX Coordinator with any questions or concerns related to their status (titleix@tamusa.edu; 210-784-2061; CAB 439K).

Texas A&M-San Antonio has also designated the Title IX Coordinator as the liaison officer for current or incoming students who are the parent or guardian of a child younger than 18 years of age. The Title IX Coordinator can provide students with information regarding support services and other resources.

<u>Students' Rights and Responsibilities:</u> The following statement of students' rights and responsibilities is intended to reflect the philosophical base upon which University Student Rules are built. This philosophy acknowledges the existence of both rights and responsibilities, which is

inherent to an individual not only as a student at Texas A&M University-San Antonio but also as a citizen of this country.

Students' Rights

- 1. A student shall have the right to participate in a free exchange of ideas, and there shall be no University rule or administrative rule that in any way abridges the rights of freedom of speech, expression, petition and peaceful assembly as set forth in the U.S. Constitution.
- 2. Each student shall have the right to participate in all areas and activities of the University, free from any form of discrimination, including harassment, on the basis of race, color, national or ethnic origin, religion, sex, disability, age, sexual orientation, or veteran status in accordance with applicable federal and state laws.
- 3. A student has the right to personal privacy except as otherwise provided by law, and this will be observed by students and University authorities alike.
- 4. Each student subject to disciplinary action arising from violations of university student rules shall be assured a fundamentally fair process.

Students' Responsibilities

- 1. A student has the responsibility to respect the rights and property of others, including other students, the faculty and administration.
- 2. A student has the responsibility to be fully acquainted with the published University Student Rules found in the Student Handbook, <u>Student Code of Conduct</u>, on our website, University Catalog and to comply with them, as well as federal, state, and local laws.
- 3. A student has the responsibility to recognize that student actions reflect upon the individuals involved and upon the entire University community.
- 4. A student has the responsibility to recognize the University's obligation to provide an environment for learning.
- 5. A student has the responsibility to check their university email for any updates or official university notification.

We expect that students will behave in a manner that is dignified, respectful, and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

Students are expected to exhibit a high level of honesty and integrity in their pursuit of higher education. Students engaging in an act that violates the standards of academic integrity will find themselves facing academic and/or disciplinary sanctions. Academic misconduct is any act, or attempt, which gives an unfair advantage to the student. Additionally, any behavior specifically prohibited by a faculty member in the course syllabus or class discussion may be considered as academic misconduct. For more information on academic misconduct policies and procedures please review the <u>Student Code of Conduct</u>.

<u>Generative AI</u>: There are situations and contexts within this course where you may be asked to use artificial intelligence (AI) tools to explore how they can be used. Outside of those circumstances,

you should not use AI tools to generate content (text, video, audio, images) that will end up in any student work (assignments, activities, discussion responses, etc.) that is part of your evaluation in this course. Any student work submitted using AI tools should clearly indicate with attribution what work is the student's work and what part is generated by the AI. In such cases, no more than 25% of the student work should be generated by AI. If any part of this is confusing or uncertain, students should reach out to their instructor for clarification before submitting work for grading. Use of AI-generated content without the instructor's permission and/or proper attribution in this course qualifies as academic dishonesty and violates Texas A&M-San Antonio's standards of academic integrity.

NOTE: Guidance for how to cite AI-generators, like ChatGPT, can be found here https://apastyle.apa.org/blog/how-to-cite-chatgpt

Important Dates:

August 26 First day of class September 11 Census Day

October 7-18 Midterm grading period

November 11 Last day to drop with an automatic "W"

November 19 Last day to drop a course or withdraw from the University

November 27 Study Day – No classes
December 5 Last day of weekday classes
December 6 Study Day – No classes

December 7-13 Final exams

The complete academic calendar is available online: <a href="https://www.tamusa.edu/academics/ac



Full Course Schedule:

Readings are to be completed BEFORE coming to class on the day that it is scheduled.

Week	Monday	Wednesday			
Module 1: Course Introduction and Foundations					
Wk. 1 (8/26 - 9/1)	 Introduction to the Course Review course policies and syllabus Overview of the textbook and course objectives Importance of statistics in criminal justice 	Guest Speaker: The Role of Statistics in Policing Output Role of Statistics in Policing In-Class Assignment			
	Module 2: Understanding Uncertaint	y and Measurement			
Wk. 2 (9/2 - 9/8)	Chapter 1: Understanding Uncertainty Discuss concepts of uncertainty and probabilitySelect partners/groups for final project	Chapter 1 Continued			
Wk. 3 (9/9 - 9/15)	 Chapter 2: Measuring What We Can't See Measurement in social sciences Challenges of measuring crime-related phenomena Submit final presentation topic 	Chapter 2 Continued • Levels of measurement • In-Class Assignment			
	Module 3: Summarizing and Analyzing Data				
Wk. 4 (9/16 – 9/22)	Chapter 3: Summarizing Data Exploring methods for summarizing data	 Chapter 3 Continued Practical application: Summarizing data from criminal justice reports In-Class Assignment 			
Wk. 5 (9/23 – 9/29)	 Chapter 4: Relationships Between Variables Understanding correlation and causation Examples from criminal justice research Annotated Bibliography Submission 	Chapter 4 Continued • Exercises: Identifying relationships in real data sets • In-Class Assignment			

Week	Monday	Wednesday		
Module 4: Statistical Models and Decision-Making				
Wk. 6	Chapter 5: The Idea of a Statistical Model	Chapter 5 Continued		
(9/30 - 10/6)	Introduction to statistical models and their	Discussion of case studies and model interpretation		
	importance	In-Class Assignment		
Wk. 7	Midterm Exam Review	**Midterm Exam**		
(10/7 - 10/13)				
Wk. 8	Chapter 6: Estimation and Inference	Chapter 6 Continued		
(10/14 - 10/20)	Basic concepts of estimation and hypothesis testing	Exercises on conducting basic statistical inference		
	Relevance to policymaking in criminal justice	In-Class Assignment		
Module 5: Advanced Analysis Techniques				
Wk. 9	Chapter 7: Simple Statistical Models	Chapter 7 Continued		
(10/21 - 10/27)	Exploring simple statistical models	Practical exercises and model applications		
		In-Class Assignment		
Wk. 10	Chapter 8: Analyzing Relationships	Chapter 8 Continued		
(10/28 - 10/3)	In-depth exploration of regression analysis	Exercises on regression analysis and interpretation		
	Application to criminal justice data	In-Class Assignment		
Wk. 11	Chapter 9: From Models to Decisions	Chapter 9 Continued		
(11/4 - 11/10)	Understanding how statistical models inform	Exercises on decision-making based on statistical		
	decision-making	models		
	Case studies in evaluation research	In-Class Assignment		
7177 10	Module 6: Research Design and Ethi			
Wk. 12	Chapter 10: Designing an Investigation	**Dr. Fenimore will be out of town for the American		
(11/11 - 11/17)	Basics of research design and data collection	Society of Criminology Annual Meeting**		
	Application to criminal justice research	O. J. of Class Assistances		
	In-Class Assignment: Design a basic research study	Out-of-Class Assignment		
117 40	in small groups and present the proposal			
Wk. 13	Chapter 11: Understanding What Models Tell Us	Chapter 11 Continued		
(11/18 - 11/24)	Interpreting the results of statistical models	Case studies and discussions on real-world		
	Discussion of limitations and ethical considerations	implications		
		In-Class Assignment		

Week	Monday	Wednesday			
	Module 7: Advanced Techniques and Course Wrap-Up				
Wk. 14 (11/25 - 12/1)	 Special Topic: Advanced Statistical Techniques Overview of more advanced techniques (e.g., logistic 	**Study Day – No classes**			
	regression, time-series analysis) Relevance to criminal justice research In-Class Activity				
Wk. 15 (12/2 – 12/6)	Guest Speaker: The Future of Statistics in Criminal Justice Q&A and discussion on career paths	Small Group Presentations			
	In-Class Assignment				
Wk. 16 (12/7 - 12/13)	**Final Exam** Covering material from Weeks 7-15				