# CJ 381/SOC 301: Statistics

Department of Criminology & Criminal Justice University of Alabama

# 1 INSTRUCTOR INFORMATION

Dr. Kearns Email: emkearns@ua.edu Website: www.erinmkearns.com Twitter: @KearnsErinM Office: Farrah Hall 431 Office Hours: Wed. 11:30am-1:30pm, or by appointment Skype: KearnsEM

\*note that all emails must originate from your University of Alabama email account. Please reference this class (CJ 381 or SOC 301) in the subject line of your email.

## 2 COURSE INFORMATION

Time: 12:30 pm - 1:45 pm Tuesday & Thursday Location: Lloyd Hall Room 228; Lab Dates: Farrah Hall 301 Prerequisites: CJ 100 and MATH 110 or MATH 112 or MATH 115 or MATH 125

# **3 COURSE DESCRIPTION**

Statistical methods in criminal justice, including central tendency and dispersion, tests of significance, and measures of association.

# 4 STUDENT LEARNING OUTCOMES

The course will help you:

- Understand the theoretical components and functional applications of probability.
- Identify levels of measurement and the appropriate statistical tools to use for the variety of measurements.
- Apply hypothesis testing to social science related research problems.
- Understand the limitations of statistical inquiry and learn how to minimize potential errors.

## 5 TEACHING METHOD

The course is structured to examine various approaches to statistics in social sciences. We will draw from the textbook, as well as from research articles in criminal justice, criminology, sociology, and related fields. To be successful in the course, you are required to read all assignments, come to class prepared, and engage fully in discussions and other course activities.

Research has shown that students learn best when they actively participate in class discussion and projects. I believe that the role of an instructor is to facilitate an active learning environment through a combination of brief lectures, productive classroom discourse, teamwork, and creative thinking. As such, the course will engage in a variety of activities in addition to lectures, including writing exercises, group work, class discussions, practical exercises, et cetera. I value your opinions about the course, and will solicit feedback periodically.

## 6 COURSE EXPECTATIONS, REQUIREMENTS & GRADING

## 6.1 ASSESSMENT

Attendance and Participation (15%): You are expected to attend and participate in class. You should thoroughly read all assigned material and bring questions to class. Points will be distributed for active participation in discussions, pop-quizzes, and class activities.

- You are permitted 2 absences for whatever reason. For each additional absence (3 or more), your grade will suffer. There is no need to provide documentation or explanations for any of your absences. Whether you dislocated your shoulder or are choosing to extend your weekend, all absences are viewed as equal. Be discerning with your 2 allowable absences. This policy is designed to avoid unfavorable conversations about attendance records near the end of the semester. Serious matters or extenuating circumstances beyond your control should be discussed privately with the professor at the earliest possible opportunity.
- We will use the TurningTechnologies to facilitate class participation and quizzes. You can use either the dedicated clicker or the phone app (ResponseWare). You are only permitted to use technology in class when I ask you to do something in TurningTechnologies.

In-Class Assignments (20%): The in-class work is <u>critical</u> to your understanding statistics, applying it, and interpreting results. Assignments must be completed in class and submitted to Blackboard by the end of the class period in which they are assigned. In the event of an absence, you have one week to turn in the assignment for full credit if excused and half-credit if unexcused.

**Pop Culture Statistics Review (5%):** As you saw on John Oliver's show, the media often misunderstand and misrepresent research. For this assignment, you will find a news article that discusses research on crime, criminal justice, or sociology. Find the original journal article that is discused in the news article and read it. You will write a review that summarizes and analyzes the news article compared to the actual research. The review should be no more than 2-3 pages. The grading rubric can be found on Blackboard.

**Exams (60%):** There will be three non-cumulative quizzes. Each has multiple choice and short answer questions designed to apply course materials to questions posed from each weeks readings and class activities.

## 6.2 TIPS ON CLASS

This is a difficult, but not impossible course. It is my hope that you will find this class challenging, but rewarding in terms of the knowledge you will walk away with. If you anticipate having difficulty (or when you are), I strongly urge you to do ALL of the following:

- Attend every lecture, and take good notes (lecture slides are posted on blackboard)
- Study and rewrite lecture notes on the day of the lecture (before you go to bed)
- Complete the reading assignment before each lecture
- Take written notes as you read the book and articles
- Discuss the material with other students. Ask them questions. Ask me questions!

## 6.3 GRADING

A = 94-100	$A_{-} = 90-94$	
A = 94-100	A = 90-94	
B + = 87-89	B = 83-86	B- = 80-82
C+ = 77-79	C = 73-76	C- = 70-72
D + = 67-69	D = 63-66	D- = 60-62
F = 59 or below		

If you have questions or concerns about a grade(s) and believe I should review them, you should submit a written request over email to me describing your concern in detail. You must take 24 hours to reflect on the grade before contacting me, but you must submit the request within one week of the date that grades for that assignment are disseminated. The exception is an addition error, which should be pointed out immediately.

Unless otherwise stated in class, there are no extra credit assignments for this class. Assignments will be graded on accuracy, depth of expression, grammar, neatness, punctuation, quality, spelling, and thoroughness. Rubrics are available on Blackboard for all graded assignments. Please note that Blackboard shows unweighted grades.

As per the Family Educational Rights & Privacy Act (FERPA), grades will not be posted, given out over the phone or email, or released to anyone other than the student.

# 7 COMMUNICATION

## EMAIL

I will send emails on a regular basis to remind students about upcoming events, due dates, important news, et cetera. These messages will come to your official university email. Students are responsible for the contents of these messages. I will respond to email within 24 hours during the week and within 48 hours on the weekend unless otherwise specified in advance.

## PROFESSIONALISM

Recently, my colleagues and I have noticed that some (by no means all) students email us using language and format more appropriate for friendly emails, not professional ones. I will only respond to emails that include: a subject, a salutation (Dear, Hello, etc.), a closing (at least your name), and proper grammar (no text speak). Additionally, if your question is about a due date, what the reading is for next week, or something else that is found in the syllabus or grading rubrics, I will not respond to your email. This is not to be harsh, but I want to make sure that all students are in the habit of corresponding professionally, which is what will be required of you in your future careers or in graduate school.

## 8 COURSE POLICIES

## STUDENT COPYRIGHT

For the benefit of future students, work in this course may be used for educational critique, demonstration, samples, presentations, and verification. Outside of these uses, work shall not be sold, copied, broadcast, or distributed for profit without student consent. Items submitted for this course also may be submitted to TurnItIn.com for analysis.

## THE MISCELLANEOUS CALAMITY CLAUSE

As you may know, each class is required to meet for a specified number of hours in a semester. When class is cancelled due to ice/hurricane/plague/zombies, these hours need to be made up. Instead making up hours at the end of the semester when you are very busy, we will simply hold class online for any week in which class is cancelled. If this happens, I record the lecture over my PowerPoint and post the video on the day we're out. Since we would not know of a cancellation in advance, the timeframe will shift slightly. You will have until the next class to respond to 3 of the discussion questions I post on Blackboard. Additionally, I am occasionally required to be out of town for professional conferences. I will give you as much advanced notice as possible and we will simply move the class online for that week.

## MAKE-UP EXAMS, ASSIGNMENTS & NOTES

Handouts, returned tests, and assignments will be brought to class and distributed only once. Students who miss such items must schedule a time to pick them up. If you are absent, you will need to get the notes from a classmate, so find a reliable source now.

All due dates are stated explicitly and are hard deadlines. You will receive a 0 if an assignment is not submitted at the time it is due. I WILL NOT accept late papers or projects. Written assignments MUST be submitted to Blackboard. Make duplicate copies as you go! No excuses will be accepted.

In an extraordinary circumstance, a make-up test can be scheduled. To qualify for a make-up, the student must notify me by email in advance of the absence and provide documentation. The make-up exam must be schedule within a week of the original test date. You will receive a 0 for unexcused absence from an exam. Examples of extraordinary circumstances include, but are not limited to: medical problems that require bed care or surgery (including yourself and immediate family members), subpoena for court or jury duty, or in-service training. Oversleeping and other personal events do not qualify. The instructor reserves the right to exercise discretion in this matter so that individual predicaments may be considered.

## CLASSROOM COURTESY

I expect all members of the classroom community to be active participants who learn from others and contribute, in turn, to the learning of others. Therefore, all members of the community agree to work together in every academic activity to create an educational environment of responsibility, cooperation, respect and civility.

To create such an environment, all members should contribute to the learning environment by arriving on time and leaving when dismissed. Repeatedly arriving late or departing early is not acceptable. Students who must arrive late or leave early from an individual class should notify the professor before the scheduled class and should enter and/or leave class with minimal disruption.

During class, all electronic devices should be shut off unless required in a class activity. Those whose work or family obligations require them to remain in contact should inform the instructor in advance and use the devices least intrusive setting.

Classroom courtesy is essential for learning. The classroom is a professional setting where appropriate behavior is expected. Every participant should focus on the educational activity and contribute to it. Electronic communication among participants should be conducted professionally.

All students have the right to learn without unneeded distractions such as: cell phones, talking out of turn, reading, falling asleep, entering and leaving the classroom, etc. If you need cell phone for emergency purposes, it must remain on vibrate. All other use of cell phones is prohibited. Laptop and tablet use is restricted. Unless you have a documented learning need, laptops and tablets may only be used to take notes. It is your responsibility to arrive on time and stay for the entire class period. If you need to leave early, tell the instructor beforehand. Repeated disruptions will lead to a reduction in your final grade. Most importantly, please remember that class discussion must be respectful and scholarly at all times.

Scholarly Comments:

- are respectful of diverse opinions and open to follow up questions and/or disagreement
- are related to class and/or the course material
- are focused on advancing the discussion about issues related to the course and/or course material rather than personal beliefs
- are delivered in normal tones and a non-aggressive manner

Unacceptable Comments:

- are personal in nature (this includes attacks on a persons appearance, demeanor, or political beliefs)
- include interrupting the instructor or other students
- often use the discussion to argue for political positions and/or beliefs. If political discussions arise in the context of the research discussed, they must be discussed in a scholarly way
- may include using raised tones, yelling, engaging in arguments with other students and being threatening in any manner
- include ignoring the instructor's authority to maintain the integrity of the classroom

## SEVERE WEATHER GUIDLINES

Please see the latest Severe Weather Guidelines in the Online Catalog.

## POLICY ON ACADEMIC MISCONDUCT

Students are expected to be familiar with and adhere to the official Code of Academic Conduct provided in the Online Catalog.

## EMERGENCY CONTACT INFORMATION

UA's primary communication tool for sending out information is through its web site at www.ua. edu. In the event of an emergency, students should consult this site for further directions. Additional course information will be posted using Blackboard Learn.

## DISABILITY STATEMENT

Contact the Office of Disability Services (ODS) as detailed in the Online Catalog.

## UACT: ETHICAL COMMUNITY STATEMENT

The UAct website (http://www.ua.edu/uact) provides an overview of The University's expectations regarding respect and civility.

## 9 REQUIRED MATERIALS

## **REQUIRED BOOKS**

- Levin, Fox & Forde (2014). Elementary Statistics in Social Research. 12th Edition.
   \* LFF 11th Edition will work as well
- Cronk, B.C. (2012). How to use SPSS. (7th Ed.). Los Angeles, CA: Pyrczak Publishing.

## **REQUIRED TECHNOLOGY**

We will use TurningTechnology to facilitate seamless, immediate, and interactive discussion and assessments in the classroom. Each time we meet, I will ask you to use TurningTechnology for quizzes or questions. You will access the platform through either a dedicated clicker (which you may have for other classes) or the phone ap (ResponseWare), so please bring one of these devices to class even though you will not be allowed to take notes electronically.

## ADDITIONAL READINGS

While most of our reading will come from the two texts, I will occassionally post additional readings to Blackbaord and alert students in advance of these. Students are required to do all the assigned reading. You are expected to read a newspaper regularly and bring in interesting and relevant articles for discussion throughout the semester.

#### HELPFUL RESOURCES

You are not required to buy the APA Publication Manual. Purdue University has an excellent online guide that should be consulted for all written materials that are submitted for this course.

https://owl.english.purdue.edu/owl/resource/560/01/

If you are having trouble with the materials and the book/lecture are not helping, here are a few useful guides to assist with SPSS and understanding statistical concepts. If your issue is still not resolved, look on Google or YouTube for tutorials. Info on the web is generally useful.

```
http://www.ats.ucla.edu/stat/spss/
http://students.brown.edu/seeing-theory/
http://callingbullshit.org/index.html
https://www.khanacademy.org/math/statistics-probability
```

## 10 COURSE SCHEDULE

This syllabus is a guide for the course. It is subject to change with advanced notice. Changes may come in class or may come via e-mail. You are responsible for all such communications.

## Class 1 (Thursday 8/24): Introduction to Statistics

- Guardian. How Statistics Lost Their Power and Why We Should Fear What Comes Next.
- Oliver, John. "Scientific Studies." Last Week Tonight. http://bit.ly/23Bdznr

Class 2 (Tuesday 8/29): Why Researchers Use Statistics \* LFF, Chapter 1 ACADEMIC INTEGRITY QUIZ DUE

- Class 3 (Thursday 8/31): Introduction to Data Analysis Meet in Computer Lab \* Cronk, Chapter 1 SPSS Assignment 1 DUE
- Class 4 (Tuesday 9/5): Organizing Data \* LFF, Chapter 2
- Class 5 (Thursday 9/7): Descriptive Statistics Meet in Computer Lab \* Cronk, Chapter 2 SPSS Assignment 2 DUE
- Class 6 (Tuesday 9/12): Measures of Central Tendency \* LFF, Chapter 3
- Class 7 (Thursday 9/14): Frequencies & Central Tendency Meet in Computer Lab \* Cronk, Chapter 3 SPSS Assignment 3 DUE
- Class 8 (Tuesday 9/19): Measures of Variability \* LFF, Chapter 4
- Class 9 (Thursday 9/21):Visualizing Data

Class 10 (Tuesday 9/26): EXAM 1

- Class 11 (Thursday 9/28): Probability & the Normal Curve \* LFF, Chapter 5
- Class 12 (Tuesday 10/3): Probability & the Normal Curve \* LFF, Chapter 5
- Class 13 (Thursday 10/5): Visually Representing Data Meet in Computer Lab \* Cronk, Chapter 4 SPSS Assignment 4 DUE
- Class 14 (Tuesday 10/10): Samples & Populations \* LFF, Chapter 6
- Class 15 (Thursday 10/12): Samples & Populations \* LFF, Chapter 6
- Class 16 (Tuesday 10/17): Testing the Differences in Means  $\star$  LFF, Chapter 7
- Class 17 (Thursday 10/19): T-Tests & Chi Square Meet in Computer Lab \* Cronk, Chapter 6, p. 55-69 & Chapter 7, p. 99-100 SPSS Assignment 5 DUE

- Class 18 (Tuesday 10/24): EXAM 2
- NO CLASS (Thursday 10/26): Mid-Semester Study Break
- Class 19 (Tuesday 10/31): Nonparametric Tests of Significance \* LFF, Chapter 9
- Class 20 (Thursday 11/2): Correlation \* LFF, Chapter 10
- Class 21 (Tuesday 11/7): Correlation \* LFF, Chapter 10
- Class 22 (Thursday 11/9): Nonparametric Tests of Correlation \* LFF, Chapter 12
- Class 23 (Tuesday 11/14): Work on Pop Culture Statistics Review
- Class 24 (Thursday 11/16): Work on Pop Culture Statistics Review
- Class 25 (Tuesday 11/21): ANOVA \* LFF, Chapter 8 Pop Culture Statistics Review due
- NO CLASS (Thursday 11/23): Thanksgiving Break
- Class 26 (Tuesday 11/28): Regression \* LFF, Chapter 11
- Class 27 (Thursday 11/30): Regression \* LFF, Chapter 11
- Class 28 (Tuesday 12/5): ANOVA & Regression Meet in Computer Lab \* Cronk, Chapter 6, p. 69-81 & Chapter 5 SPSS Assignment 6 DUE
- Class 29 (Thursday 12/7): Applying Statistics to Research & Recapping the Semester \* LFF, Chapter 13
  Bring questions for final exam

Class 30 (Tuesday 12/12 from 11:30am - 2:00pm): EXAM 3