# DEPARTMENT OF CRIMINAL JUSTICE & CRIMINOLOGY COLLEGE OF CRIMINAL JUSTICE SAM HOUSTON STATE UNIVERSITY

COURSE SYLLABUS CRIJ 4377-02 CJ DATA ANALYSIS SPRING 2018

Instructor: Ling Ren, Ph.D.Credit Hours: 3Class Hours: OnlineClassroom: OnlineOffice: C211Phone: 936-294-4793

E-mail: Lren@shsu.edu

# **Course Description**

This course is designed to help students develop the basic statistical knowledge and skills necessary to conduct data analysis in criminal justice research. Application of research methods and statistics rather than underlying mathematical theories is the major focus of this course. Topics covered include descriptive and graphical techniques, probability and sampling theory, normal distribution and statistical inference, T and F distributions, Chi-square test, and analysis of variance. Successful completion of this course will enable students to perform basic statistical analysis of data collected in the field of criminal justice.

### **Course Objectives**

- 1. Understand the role of statistics in criminal justice research;
- 2. Understand the basic mathematical foundations of statistical concepts and procedures in criminal justice research;
- 3. Develop an ability to conduct basic statistical analysis for criminal justice research;
- 4. Develop an ability to appropriately interpret the results of statistical operations.

### **Course Format**

This online course will be delivered via an education software called *Blackboard*. It is important that the students have a computer/laptop and internet connection that work properly throughout the entire semester. For the technical requirements and the specifics about how to get started in the online class, please refer to the following website at <a href="http://distance.shsu.edu/current-students/orientation.html">http://distance.shsu.edu/current-students/orientation.html</a>

Given the unique nature and complexity of this class, it is crucial for the students to watch the pre-recorded Kaltura video-lectures along with the PowerPoint slides posted online. The number and length of video clips vary depending on the complexity of the chapter content. Students are also expected to read the assigned readings, complete the assignments, and take the exams. The homework assignments and exams are designed in accordance with the chapter content discussed

in the Kaltura videos and in the textbook. When you have questions about the course content, feel free to email the instructor. In addition, On-line Discussion Board is set up for each session to build a vibrant learning community and to promote class interactions. Students' participation in class discussion is voluntary and will not be graded.

Students will be informed of the class updates, changes and new developments by means of mass emails and class announcements. It is important for the students to check the course website and the SHSU email accounts for the updates on a daily basis.

### **Technical Support**

For questions about Blackboard or technical issues with videos, assignments, or tests, please contact SHSU Online Support Desk:

### Technology Call Center (Dedicated personnel available)

Phone: (936) 294-2780 Monday – Friday, 24 hours Saturday, 7am-midnight CST (Central Standard Time) Sunday, 1pm-midnight CST

### Chat with the Support Desk:

Monday – Friday, 24 hours Saturday, 7am-midnight CST (Central Standard Time) Sunday, 1pm-midnight CST

### Email to the Support Desk at <u>blackboard@shsu.edu</u>

Monday – Friday, 24 hours Saturday, 7am-midnight CST (Central Standard Time) Sunday, 1pm-midnight CST

For questions about your email account, or password assistance, please refer to the IT@Sam Help Desk:

Phone: (936) 294-1950 Email: helpdesk@shsu.edu

Monday-Thursday: 7:30am - 9pm CST

Friday: 7:30am - 6pm CST

#### **Required Textbook & Tools**

James Alan Fox, Jack Levin, & David R. Forde. (2013). *Elementary Statistics in Criminal Justice Research* (Fourth edition). Pearson. ISBN-10: 0132987309; ISBN-13: 978-0132987301

**Calculator**: it should have the functions of addition, subtraction, multiplication, division, square root, and exponent.

### **Grading**

Exam 1	100 points
Exam 2	100 points
Exam 3	100 points
<b>Homework Assignments</b>	200 points
Total	500 points

Final grades are determined by the number of **POINTS** that are earned throughout the semester.

A= 450-500 points B= 400-449.99 points C= 350-399.99 points D= 300-349.99 points

F= 0-299.99 points

#### 1). Exams

There will be **THREE** exams including the final. Exams are open book, open notes. Each exam consists of 40 multiple choice questions and 10 True and False Questions (2 points each). Each exam will primarily focus on 3 or 4 chapters. It is important to note that some questions in the 2<sup>nd</sup> and final exams would assume knowledge and understanding of material covered previously. You will find that the material in the course progressively build upon itself such that what you learn from earlier chapters will be the foundation for the later ones. All exams are time-limited. Specific dates and times for exams are listed in Class Schedule on Pages 6-8. Before each exam, students will be provided with the detailed instructions on how to prepare for and take the online exam. For example, Sample Questions and Practice Problems will be offered to help the student better prepare for the exams.

#### 2). Homework Assignments

There will be **11** homework assignments over the course of the semester. Assignments are worth 20 points each. Of the 11 homework assignments, your lowest score will be dropped at the end of the semester, meaning only 10 will count toward your final grade. The homework assignments are designed to enhance students' understanding of the course content and to measure your ability to apply this understanding to real-world problems. Each student is expected to turn in his/her homework assignment on an individual basis. Refer to Class Schedule on Pages 6-8 for the specific due date for each homework assignment. FOUR important issues related to homework assignments listed below deserve your special attention:

## A) Required Format of Homework Assignment Submissions

Microsoft Word (MS) and PDF are the only two formats in which your homework assignments shall be prepared and submitted. If you are familiar with Microsoft "Equation editor" or "Symbols", you can choose to prepare your homework in Microsoft Word. You can also handwrite

your answers and scan them by using a standard scanner. The "Scanner" approach is suggested to be more efficient for most of the students due to the unique nature of this class. When you scan your work, make sure you combine multiple pages into ONE single PDF file.

The image-format files such as JPG and JPEG inserted into a Microsoft Word document will not be considered as one of the required formats. Homework submissions prepared in the formats other than the MS or PDF described above will automatically result in a grade of zero.

### **B)** Intermediate Steps and Rounding

For the detailed instructions on rounding and the intermediate steps for your homework assignments, see slide #7 and #13 respectively in the Kaltura Video "A Review of Some Fundamentals of Math" placed in "Session 1."

#### C) Homework Assignment Submission

The due time and days of your homework assignments are always by 8:00:00pm (CST) on Saturdays. Homework must be submitted online; email submission will not be accepted except in cases of emergency or tech problem. For how to submit the assignments online, please refer to "Instructions on Submitting Assignments to the Course" included in Session 1. Similar information can be found on the sidebar under "Quick Links" that you have access anytime throughout the semester. Every student has only one opportunity to submit his/her homework online. Before the online submission, please double check to make sure that the version to be submitted is correct and final. It is suggested that you submit your work at least one hour prior to the deadline in case tech problem occurs at the time of your submission. Late submission will NOT be accepted except in an emergency. If a genuine emergency exists, please inform the instructor by email immediately. The situation related to the emergency must be written and appropriately documented. Giving a deadline extension is at instructor's discretion with valid excuse provided by students.

In case you encounter a tech problem that precludes you from submitting your work, do the following two things:

First, take a photo of your computer screen that shows the error message. Write an email and attach the photo of the error message to the instructor immediately.

Second, call the SHSU Online Support Desk immediately and carefully document the information about the call (e.g., the specific time when the call is made, the name of the technician you speak to, the type of tech problem you are told, the length of your call). So the instructor can verify the information with the technician(s) in order to consider a proper solution for the situation(s).

Please be noted that this 2-step strategy described above is also applied to the tech-problem situations in the three exams.

#### D) Be aware of the service hours by the SHSU Online Support Desk.

The service hours of the SHSU Online Support Desk are listed on page 2. If you choose to watch the videos or do your homework assignments outside of the service hours, you will be responsible for any inconvenience caused by the potential tech problem(s) of your computer/laptop or internet. It is highly recommended to work on the course within the service hours of the Online Support Desk, so you can receive the tech support right away if needed.

#### Make-up Work

Exams and homework assignments must be completed and turned in on the due dates (or the amended due dates if later clarified by the instructor). If an unavoidable conflict with one of the dates exists (e.g., medical situation, job interview, family-related emergency), please contact the instructor before the test is administered or an assignment becomes due. Failure to turn in homework assignments or take an exam on the scheduled date without making prior arrangements will result in a ZERO on that particular exercise. Giving a make-up exam is at instructor's discretion with VALID excuse provided by students. The excuse must be written and appropriately documented.

# **Reading Assignments**

You are expected to read each assigned reading in the Reading Assignments list. Reading the assignments will better prepare you for the Kaltura lectures.

# **Academic Honesty**

In accordance with Academic Policy Statement 810213

- 5.3 Academic Honesty. The University expects all students to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action.
- 5.31 The University and its official representatives, acting in accordance with Subsection 5.32, may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating, plagiarism, collusion, and the abuse of resource materials.

The University's policy on academic honesty and appeal procedures can be found at <a href="http://www.shsu.edu/dept/academic-affairs/aps/aps-students.html">http://www.shsu.edu/dept/academic-affairs/aps/aps-students.html</a>

#### **Disabled Students Policy**

It is the policy of Sam Houston State University that no otherwise qualified disabled individuals shall, solely by reason of their disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any academic program or activity.

Students with disabilities that might affect their academic performance are expected to visit with

the Office of Services for Students with Disabilities located in the Counseling Center. Students are also encouraged to discuss any concerns with the instructor.

More information can be found at <a href="http://www.shsu.edu/dept/academic-affairs/aps/aps-students.html">http://www.shsu.edu/dept/academic-affairs/aps/aps-students.html</a>

#### **Services for Disabled Students**

Accommodations are provided for students who are registered with the Counseling Center. Information on a variety of services available to disabled students can be found at <a href="http://www.shsu.edu/dept/academic-affairs/aps/aps-students.html">http://www.shsu.edu/dept/academic-affairs/aps/aps-students.html</a>

#### **Student Absences on Religious Holy Day Policy**

In accordance with Academic Policy Statement 861001

Section 51.911 (b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

Any student desiring to be absent in order to observe a religious holy days(s) should meet with the instructor in the first two weeks of the course to discuss appropriate times to make up any work to be missed.

Please refer to the website <a href="http://www.shsu.edu/dept/academic-affairs/aps/aps-students.html">http://www.shsu.edu/dept/academic-affairs/aps/aps-students.html</a> for more information on this subject.

#### Withdrawals

Students wishing to withdraw are cautioned to follow formal procedures outlined by the University. Consult the Sam Houston State University Undergraduate Catalog, 2017-2018 for official policies under "tuition and fees refund policy" and "dropping courses."

#### CLASS SCHEDULE\*

<u>Session</u>	<u>Dates</u>	Topic & Reading Assignments
1	1/17-1/20	Course Introduction (Watch "Intro to Course" video) Review the Course Syllabus Student Introductions Lecture video: A Review of Some Fundamentals of Math Assignment 1 due Saturday, 1/20 by 8:00:00pm CST (Central Standard Time)

2	1/21-1/27	Chapter 1 Why the Criminal Justice Researcher Use Statistics Assignment 2 due Saturday, 1/27 by 8:00:00pm CST
3	1/28-2/3	Chapter 2 Organizing the Data Assignment 3 due Saturday, 2/3 by 8:00:00pm CST
4	2/4-2/10	Chapter 3 Measures of Central Tendency Assignment 4 due Saturday, 2/10 by 8:00:00pm CST
5	2/11-2/17	Prepare for Exam #1 (Review Video Lectures, PPT Slides & Homework Assignments) Sample Questions 30 Practice Problems Question & Answer at Virtual Office or by email Exam # 1 on 2/14-2/17 (Wednesday-Saturday), due Saturday, 2/17 by 8:00:00pm CST
6	2/18-2/24	Chapter 4 Measures of Variability Assignment 5 due Saturday, 2/24 by 8:00:00pm CST
7	2/25-3/3	Chapter 5 Probability & the Normal Curve Assignment 6 due Saturday, 3/3 by 8:00:00pm CST
8	3/4-3/10	Chapter 6 Sample & Populations Assignment 7 due Saturday, 3/10 by 8:00:00pm CST
	3/11-3/17	Spring Break (No Class)
9	3/18-3/24	Chapter 7 Testing Differences between Means (the 1 <sup>st</sup> half) <b>Assignment 8 due Saturday, 3/24 by 8:00:00pm CST</b>
10	3/25-3/31	Prepare for Exam # 2 (Review Video Lectures, PPT Slides & Homework Assignments) 30 Practice Problems Question & Answer at Virtual Office or by email Exam # 2 on 3/28-3/31 (Wednesday-Saturday) due Saturday, 3/31 by 8:00:00pm CST (Note: 3/30 is the University Holiday – Good Friday)
11	4/1-4/7	Chapter 7 Testing Differences between Means (the 2 <sup>nd</sup> half) <b>Assignment 9 due Saturday, 4/7 by 8:00:00pm CST</b>
12	4/8-4/14	Chapter 8 Analysis of Variance Assignment 10 due Saturday, 4/14 by 8:00:00pm CST

13	4/15-4/21	Chapter 9 Nonparametric Tests of Significance Assignment 11 due Saturday, 4/21 by 8:00:00pm CST
14	4/22-4/28	Extra-Credit Assignment (Optional) Extra-Credit Assignment due Saturday, 4/28 by 8:00:00pm CST
15	4/29-5/5	Prepare for Final Exam (Review Lecture Videos, PPT Slides & Homework Assignments) 30 Practice Problems Question & Answer at Virtual Office or by email
16	5/6-5/9	Final Exam on 5/6-5/9 (Sunday-Wednesday), due Wednesday, 5/9 by 8:00:00pm CST

st Schedule is subject to change as necessary. It is the responsibility of the students to remain informed of any changes.