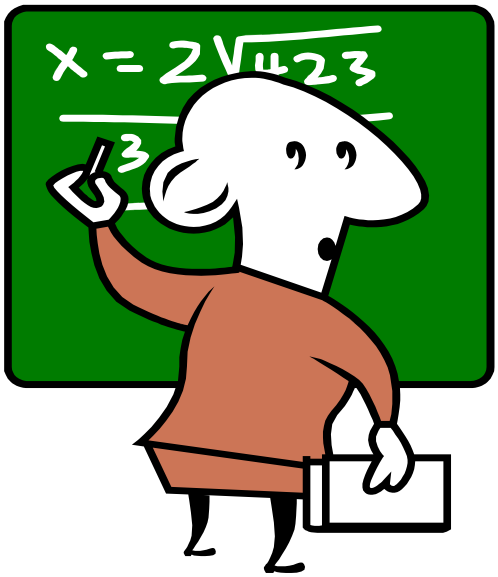
CJ 656: Applied Statistics in Criminal Justice

Section 201



Spring 2016

Thursdays 4:00-6:20, Smith Hall 418

Criminal Justice & Criminology Program
Marshall University

Dr. Dru Bora
Science Building 270
Phone: 304-696-3638
Fax: 304-696-3243
Email: bora@marshall.edu
Web Page: http://science.marshall.edu/bora/

Office Hours: By Appointment

REQUIRED TEXTS

Miethe, T.D. (2007). *Simple Statistics: Applications in Criminology and Criminal Justice.* New York: Oxford University Press (ISBN# 978-0-19-533071-7).

Holcomb, Z. C. (2014). *SPSS Basics: Techniques for a First Course in Statistics (5th ed.).* Glendale, CA: Pyrczak Publishing (ISBN# 978-1-936523-25-2).

COURSE DESCRIPTION

This course focuses on the principles of statistical techniques with emphasis upon their application in the criminal justice system.

Note: This course will be taught as a blended course. A blended course is one where 50% of the content is delivered in the classroom and 50% of the content is delivered online. This course will include interactive, web-based activities, a student-centered learning approach, and frequent feedback loops to enhance learning.

CREDIT HOURS & PREREQUISITES

3 credits; CJ 655.

COMPUTER REQUIREMENTS

A student must have a computer or access to one, as well as access to the Internet to send and receive email messages. If you are using an email account other than your Marshall email account, you must set your Marshall email account to forward to your other account. Furthermore, because this is a blended course, students will be required to have access to Blackboard through MUOnline in order to complete the necessary online exercises and assignments. Make certain that you use a computer that is compatible for completing any online course requirements (I recommend an Internet connection that is fast and secure). You can access Blackboard courses at: http://www.marshall.edu/muonline/ . If you need technical assistance with Blackboard please contact Marshall's Help Desk at 877-689-8638 (toll

free) or Charleston area 746-1969 or Huntington area 696-3200. The help desk can also be reached by email at helpdesk@marshall.edu.

COURSE LEARNING OUTCOMES

Course Objectives: Upon completion of this course, students will be able to:

- Evaluate statistical information presented in everyday situations.
- Demonstrate the basics of descriptive and inferential statistics.
- Understand the different techniques used in criminal justice research to summarize, analyze, interpret, and evaluate data.
- Distinguish between different statistical procedures and be able to identify which procedure is appropriate for different types of data and research designs.
- Effectively use the Statistical Program for Social Sciences (SPSS), which is the predominant statistical software in the social sciences.

Course Learning Outcomes Matrix:

Course Learning Outcome	How Each Outcome is Practiced in this Course	How Each Outcome is Evaluated in this Course
Students will be able to demonstrate oral, written, and analytic abilities by evaluating contemporary criminal justice issues using analytical reasoning, problem solving, and effective written communication skills.	In-class lectures, activities, and discussions	Quizzes, assignments, and exams
Students will be able to demonstrate oral, written and analytic abilities by interpreting descriptive and inferential statistical data.	In-class lectures, activities, and discussions	Quizzes, assignments, and exams

COURSE REQUIREMENTS

- There will be a midterm exam and a final exam in this course. Both exams will be worth 25% of the overall grade. The midterm will be completed in two parts (one part online and the other in class). The final exam will be taken entirely in the classroom. Both exams will consist of multiple choice, true/false, short answer, and problems. The final exam is ***not*** comprehensive; however, due to the nature of this course, it is essentially comprehensive because topics build upon each other. The dates for these exams are as follows:

  Midterm Exam, Part 1 - Thursday, March 10 (online)
  Midterm Exam, Part 2 - Thursday, March 17 (in class)
  Final Exam - Thursday, May 5 (in class)

- Assignments and online exercises/quizzes will be given to strengthen student understanding of the topics covered in class. These activities will constitute 50% of the overall grade. The assignments must be typed, which means no hand written work will be accepted (except for formulas and hand

calculations). Late assignments will be penalized one letter grade for each day late and will not be accepted after three days past the due date. For a detailed explanation of when these assignments and exercises will be distributed, due, and returned, please see the course schedule at the end of this syllabus.

PAPER GUIDELINES

As mentioned above, a number of assignments will be required. Guidelines and directions for these assignments will be handed out according to the course schedule provided below. Due dates for these assignments are also provided; thus, no excuse will be accepted for delinquent assignments.

ATTENDANCE POLICY

Attendance will be recorded, but only for my purposes. This is a graduate course, so it is up to you if you come to class. However, I must point out the difficulty level of this course. Missing even one class will put you behind, and as a blended course that will only convene on eight occasions, this is even more important. If you miss class, it is your responsibility to get the notes and assignments from another student and hand in the assignments when they are due, no exceptions.

If you miss an exam with no legitimate documented excuse, a zero will be given for that test with no make-up test. If you are ill or know in advance that you will miss an exam for a legitimate excuse, you (or your representative) must notify me ***BEFORE*** the scheduled exam time. If I am not notified before the exam, you will be given a zero regardless of the excuse).

GRADES

Criteria	Weight	Scale
Assignments & Online Exercises	50 %	90-100% = A
Midterm Exam	25 %	80-89% = B
Final Exam	25 %	70-79% = C
		60-69% = D
		Below 60% = F
TOTAL	100 %	

"There are three kinds of lies: lies, damned lies and statistics." -Benjamin Disrael

BORA'S "TEN COMMANDMENTS"

1. As a general rule, I don't allow my lectures to be tape-recorded. Exceptions are made for students with disabilities; however, prior permission must be obtained from me.

2. All cell phones must be turned off and put away (out of view) at the commencement of class, with the exception of emergency service personnel. Cell phones are disruptive not only to me, but your fellow students, so please be courteous. You will receive only one warning if your cell phone goes off in class, or if I catch you playing with it during class (e.g., **texting**). Your grade will be penalized after the first warning.

3. You may NOT eat during class. This means food of any kind (chips, sandwiches, candy, etc.). However, drinks are permitted (non-alcoholic of course). Also, you should not be working on

anything not related to this class once class commences (this includes reading, copying other's notes, knitting, playing games on your cell phone, etc.).

4. Do NOT leave the classroom once class has started, unless it is an absolute emergency or you have notified me before class that you will be leaving. You should use the restroom, get a drink of water, make a phone call, etc. before class starts.

5. Don't cheat or plagiarize! Academic dishonesty is something I take very seriously and will not tolerate. Anyone caught cheating or plagiarizing will automatically receive a failing grade for the course and will be referred to the dean for appropriate disciplinary action. Plagiarism from the internet has become a very serious problem and professors now have access to various software programs to identify this behavior, so at this point in your academic career, don't risk it! For a detailed explanation of academic dishonesty, please see the undergraduate catalog.

6. Don't hesitate to ask questions, the dumbest question is the one not asked! If you ask a question I can't answer, I'll find out the answer and get back to you. Please remember that as a teacher, I am merely your guide through the field, I am not the field itself!

7. During discussions please respect different viewpoints; there is always more than one side. Treat others' views as you would want your own to be treated, with an open mind. Personal attacks on others will not be tolerated!

8. I like to run my classes as an open forum where we can all learn from each other, so I encourage intelligent discussions, questions, and comments, but at the same time we have to remember that we are at a university setting and must act accordingly.

9. I encourage all my students to make use of my office hours, they are there for you. If you can't make it at the scheduled times, let me know and we can arrange to meet at another time. However, this invitation is only for those students who come to class on a regular basis and put forth a genuine effort to learn. Also, please keep in mind that I have a life too and while my office hours are mandatory, my other time is not, so my flexibility can only extend so far.

10. Enjoy! Have fun! Learn! Some students feel that each of these endeavors are independent of each other, they are not. You can enjoy and have fun while learning. I hope to make it as comfortable as I can for you, but it will take some work on your part as well.

"Like dreams, statistics are a form of wish fulfillment." -Jean Baudrillard

TENTATIVE COURSE SCHEDULE

IMPORTANT: In the event that a face-to-face class is canceled due to inclement weather, we will meet in class that following week even if we were scheduled for an "online" session. In other words, the online session will be postponed in order to allow us to make up any missed class presentations.

Week 1	Jan 14
Perspective & Rationale for Statistical Analysis -Read Miethe Chapters 1-2	
Week 2 (Online)	Jan 21
Measurement Issues; Introduction to SPSS -Read Miethe Chapters 3-4 and Holcomb Chapters 1-5 -Online Exercises 1 available	
Week 3	Jan 28
Measures of Central Tendency & Dispersion -Read Miethe Chapters 5-6 and Holcomb Chapters 6-7 -Assignment 1 & SPSS Assignment distributed -Online Exercises 1 due in class	
Week 4 (Online)	Feb 4
Measures of Central Tendency & Dispersion (cont.) -Assignment 1 & SPSS Assignment due online -Online Exercises 2 available	
Week 5	Feb 11
The Normal Distribution & Probabilities -Read Miethe Chapter 7 -Assignment 2 distributed -Online Exercises 2 due in class (Assignment 1 & SPSS Assignment returned)	
Week 6 (Online)	Feb 18
The Normal Distribution & Probabilities (cont.) -Read Holcomb Chapter 8 -Assignment 2 due online -Online Exercises 3 available	
Week 7	Feb 25
No Class	
Week 8	Mar 3
Inferential Statistics & Confidence Intervals -Read Miethe Chapter 8 -Assignment 3 distributed -Online Exercises 3 due in class (Assignment 2 returned)	

Week 9 (Online)	Mar 10
Inferential Statistics & Confidence Intervals (cont.) & Midterm Exam -Assignment 3 due online -Complete Midterm Exam- Part 1 online	
Week 10	Mar 17
Midterm Exam & Hypothesis Testing -Complete Midterm Exam- Part 2 in class -Read Miethe Chapters 9-10 -Assignment 4 and Advanced SPSS Assignment distributed (Assignment 3 returned)	
Week 11	Mar 24
Spring Break **(No Class)**	
Week 12 (Online)	Mar 31
Hypothesis Testing (cont.) -Read Holcomb Chapters 12-14 -Assignment 4 & Advanced SPSS Assignment due online -Online Exercises 4 available	
Week 13	Apr 7
Chi-Square Test of Statistical Significance & Measures of Association; ANOVA -Read Miethe Chapters 11-12 -Assignment 5 distributed -Online Exercises 4 due in class (Assignment 4 & SPSS Assignment returned)	
Week 14 (Online)	Apr 14
Chi-Square Test of Statistical Significance & Measures of Association (cont.) -Read Holcomb Chapters 15-17 -Assignment 5 due online -Online Exercises 5 available	
Week 15	Apr 21
Causality & Correlation; Regression -Read Miethe Chapter 13 -Assignment 6 distributed -Online Exercises 5 due in class (Assignment 5 returned)	
Week 16 (Online)	Apr 28
Causality & Correlation; Regression (cont.) -Read Holcomb Chapters 9-11 -Assignment 6 due online -Online Exercises 6 available	

Week 17	May 5
Final Exam (Thursday, May 5, 4:00-6:00pm) -Complete entire Final Exam in class	

UNIVERSITY POLICIES

By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to www.marshall.edu/academic-affairs and clicking on "Marshall University Policies."

- *Academic Dishonesty*
- *Excused Absence Policy for Undergraduates*
- *Computing Services Acceptable Use*
- *Inclement Weather*
- *Dead Week*
- *Students with Disabilities*
- *Academic Forgiveness*
- *Academic Probation and Suspension*
- *Academic Rights and Responsibilities of Students*
- *Affirmative Action*
- *Sexual Harassment*