Fall 2007
CJ685: Statistics for Criminal Justice Research
CJ615: Criminal Justice Statistics Lab
MW 3:00-4:50pm., A210 CJ Center

Instructor: Yan Zhang, Ph.D.
Office: C-103
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Course Description:

This is an introductory statistics course. We will cover descriptive, univariate statistics, bivariate techniques, and one or two multivariate statistical techniques. The aim of the course is for you to develop basic understanding of the role of statistics in criminal justice research, know the uses of some statistical techniques, and know which types of techniques are appropriate for which types of data. In this course, we will also introduce how to use statistical software--the Statistic Package for the Social Sciences (SPSS). We will cover basics of how to use SPSS entering data, managing data, and conducting basic analysis. Statistics lab will be held to assist you with your course work.

Course Objectives:

The course objective is to prepare the student to:
- Understand the basic statistical procedures for criminal justice and criminological research
- Be able to use SPSS entering and editing data, and conducting basis analysis
- Be able to apply univariate, bivariate, and multivariate statistical techniques in their research project, and
- Appropriately interpret statistical operations

General Expectations:

Class lectures are not intended to be your only source of information for this course. It is very important that you read all the outlined chapters, review these chapters as necessary, and seek other materials that could supplement your knowledge or assist you in better understanding the materials we are covering in class. You are encouraged to form study groups with other members of the class, but you need to work independently on required tasks such as homework assignments (outlined below).

You are expected to approach me or the teaching assistant with questions/problems about the course, unclear concepts and further explanations.

Required Texts:

Bachman, Ronet and Raymond Paternoster (2005). Statistics for Criminology and Criminal Justice, 2nd Edition. New York: McGraw-Hill.

Norusis, Marija J. (2007). SPSS 15.0 Guide to Data Analysis. Englewood Cliffs, NJ: Prentice-Hall.

Course Requirements and Grading:

Assignments: 30%
Midterm Exam: 25%
Final Exam: 25%
Final Project: 20%

Assignments:

There will be weekly assignments that you need to complete independently. These assignments are due at the beginning of the next class period. Late assignments will not be accepted.

Midterm Exam:

This will cover materials discussed until the assigned midterm date. Sometimes we may be able to cover more than the materials outlined in the syllabus, sometimes less depending upon how the semester goes. Whichever topic we would have covered right before the midterm exam date will be included.

Final Exam:

This will cover all topics discussed from the date of the midterm through the final exam, and some topics discussed before the midterm exams. You will be informed of the specific topic areas before the midterms that would be included in the final exam. Also note that some questions in the final exam would assume knowledge and understanding of materials we have covered before the midterms, as materials covered in the course builds upon itself.

Project:

Each student is expected to complete an 8-10 page research paper. This paper should demonstrate what you have learned from the class and is expected to contain:
1. Introduction part, which specify the topic to be investigated.
2. A brief, concise review of relevant literature of not more than 4 pages long;
3. Hypothesis formulation (using a dataset you may already have and are familiar with or one that was downloaded from ICPSR), outlining independent, dependent and control variables;
4. Use of relevant statistical techniques that we have covered in class to test your hypothesis, specifically using univariate, bivariate and one multivariate technique (multiple regression or logit/probit); and,
5. An explanation and interpretation of your statistical results.
4 and 5 should take up a greater proportion of your paper. You should fully explain what your statistics mean and what you can deduce from them as they relate back to your hypotheses and literature review. Grading will be heavily on this portion of your paper. Also student is expected to present his/her project in the class.

Useful websites:
www.icpsr.umich.edu/NACJD
http://www.ojp.usdoj.gov/bjs/

Attendance:

Class attendance requirements will be followed in accordance with Academic Policy Statement 800401.

Make-up Exams:

Students are expected to take the examination on the dates indicated in the schedule. Make-up exams should not be considered an option, and will only be administered in the case of special circumstances and with the appropriate documentation. In the case of a make-up exam, the instructor must be notified within 24 hours of the scheduled exam, and provided with documentation to verify the unavoidable circumstances.

Course Schedule:

Date	Topics	Readings	Tasks
Aug 20	Introduction to the course	B & P, Ch 1	
Aug 22	Review of SPSS	SPSS, Chs. 1-3	
Aug 27	Levels of Measurement and Descriptive Statistics	B & P, Chs. 2-3	
Aug 29	Counting, computing, and comparing	SPSS, Chs. 4-6	
Sep 3	Labor Day, no class		
Sep 5	Measure of Central Tendency & Dispersion	B& P, Chs. 4-5	Assign#1 due
Sep 10	Probability and Statistical Inference	B & P, Ch. 6	Assign#2 due
Sep 12	Probability and statistical inference	B & P, Ch. 6	
Sep 17	A continuous probability distribution—the standard normal distribution	B & P, Chs. 6	
Sep 19	Looking at distributions	SPSS, Chs. 7,10,11	
Sep 24	Point Estimation & Confidence Intervals	B & P, Chs. 7	Assign#3 due
Sep 26		SPSS	
Oct 1	From Estimation to Statistical Tests	B & P, Ch. 8	Assign#4 due
Oct 3	Testing a hypothesis about a single mean	SPSS, Ch. 12	
Oct 8	Testing Hypotheses with Categorical Data	B & P, Ch. 9	Assign#5 due **Research paper topic due**
Oct 10		SPSS, Chs 8,17,19	
Oct 15	Review		Assign#6 due
Oct 17	**Midterm Exam**		

Oct 22	Two Sample Tests Involving Means & Proportions	B & P, Ch. 10	
Oct 24	Testing a hypothesis about two means	SPSS, Chs 13& 14	
Oct 29	Analysis of Variance	B & P, Ch. 11	Assign#7 due
Oct 31	Analysis of Variance	SPSS, Chs 15& 16	
Nov 5	Bivariate Correlation and Regression	B & P. Ch. 12	Assign#8 due
Nov 7	Linear regression and correlation	SPSS, Chs 9, 20-22	
Nov 12	Multiple Regression	B & P. Ch. 13	Assign#9 due
Nov 14	**ASC, no class meeting**		
Nov 17	Multiple Regression	B & P. Ch. 13 SPSS, Chs. 23-24	
Nov 19	Regression Analysis with Dichotomous Dependent Variable	B & P. Ch. 14	Assign#9 due
Nov 21	**Thanksgiving**		
Nov 26	Regression Analysis with Dichotomous Dependent Variable	B & P. Ch. 14	
Nov 28	Review		
Dec 3	Project presentation		**Project Due**
Dec 5	Project presentation		

Academic Honesty:

The Faculty of the College of Criminal Justice expects students to conduct their academic work with integrity and honesty. Acts of academic dishonesty will not be tolerated and can result in the failure of a course and dismissal from the University.

Academic dishonesty includes, but is not limited to, cheating on a test, plagiarism, collusion--the unauthorized collaboration with another person in preparing work offered for credit, the abuse of resource materials, and misrepresentation of credentials or accomplishments as a member of the college.

The University's policy on academic honesty and appeal procedures can be found in the manual entitled Student Guidelines, distributed to Division of Student Services. (Reference Section 5.3 of the SHSU Student Guidelines)

Disabled Student Policy:

"Students with a disability which affects their academic performance are expected to arrange for a conference with the instructor in order that appropriate strategies can be considered to ensure that participation and achievement opportunities are not impaired." The physically impaired may contact the Director of the Counseling Center as chair of the Committee for Continuing Assistance for Disabled Students by telephone (ext. 1720).

Student Absences on Religious Holy Day Policy:

Section 51.91(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.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself fro ma scheduled class in order to observe a religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). This request must be made in the first fifteen days of the semester or the first seven days of a simmer session in which the absence(s) will occur. The instructor will complete a form notifying the student of a reasonable time frame in which the missed assignment and/or examinations need to be completed.