

## **Sociology 543: Social Statistics Spring, 2008**

**Credit Hours: 3 hours**

**Location of Class Meeting: University Center/CTR**

**Class Meeting Times: Monday, 6-9 pm**

**Instructor: Dr. Furjen Deng**

**Office: AB1, 311C Phone: (936)294-1515, Fax: (936)294-3573, Email: soc\_fjd@shsu.edu**

**Office Hours: MWF: 11-3 p. m., or by appointment**

### **COURSE DESCRIPTION:**

The purpose of this course is to teach you how to analyze data using various advanced statistical techniques. The statistical techniques introduced include, but are not limited to, descriptive statistics, hypothesis testing, correlation, partial correlation, multiple regression, and logistic regression. Lectures, assigned readings and projects will be used to describe and illustrate the logic, interpretation, and assumptions of each statistical model. Statistical Package for Social Sciences (SPSS) is also adopted to analyze the data. Emphasis is upon intuitive understanding of the techniques and their assumptions as well as on applications.

### **TEXTS:**

1. Norušis, Marija J. 2007, *SPSS 15.0: Guide to Data Analysis*, Prentice Hall: Englewood Cliffs, New Jersey.
2. Kahane, Leo H. 2001, *Regression Basics*, Thousand Oaks, CA: Sage Publications.
3. Menard, Scott. 2001. *Applied Logistic Regression Analysis*, 2<sup>nd</sup> edition, Sage Publications: Thousand Oaks, California.
4. A pack of lecture notes is on sale at *Eagle Graphics* (phone #:(936) 295-6343).

### **REQUIREMENTS:**

**Projects:** Each student is required to complete 4 projects applying the major statistical techniques to concrete problems using the General Social Survey data file (*gss2002.sav*) or any data set of your choice. While you can talk to each other about the projects, please be sure to do your own write-up. Projects and a specific due date for each project will be announced in the class and posted on Blackboard. You can email, fax, or mail me the project before the deadline.

### **NO LATE PROJECTS.**

**Exams:** There will be two major exams: midterm (March 3) and final (May 12). Both exams are open books and open notes. March 7, half-semester course ends and last day to drop the course without grade of F.

**Grading Policy:** Your final course grade will be computed as follows:

<u>Source</u>	<u>Percent</u>
4 projects	20
<u>2 Exams</u>	<u>80</u>
Total	100

You should get about 90% for an "A", 80% for a "B", and 70% for a "C".

**Class Attendance:** If you miss many lectures or don't keep up with the assigned readings, you are likely to have trouble. If you have trouble and need help, don't wait around for a miracle. Come see me as soon as possible! Remember: if you miss a lecture, it is your responsibility to get lecture notes from someone who was there.

### **ACADEMIC DISHONESTY POLICY**

All students are expected 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. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials. At a minimum the student will receive a failing grade on the assignment in which dishonesty was involved.

### **STUDENT ABSENCES ON RELIGIOUS HOLY DAYS POLICY**

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. "Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20, Tax Code. If a student plans to be absent from class for the observance of a religious holy day, he/she **must** provide the instructor with the dates to be missed for religious reasons by February 3, 2006. Students remain responsible for all work.

### **DISABLED STUDENT POLICY**

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. 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. They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If a student has a

disability that may affect adversely his/her work in this class, then the student is encouraged to register with the SHSU Counseling Center and to talk with the instructor about how best to deal with the situation. All disclosures of disabilities will be kept strictly confidential. NOTE: no accommodation can be made until the student registers with the Counseling Center (Lee Drain Annex, (936)-294-1720).

### **INSTRUCTOR EVALUATIONS**

To enhance the quality of teaching, each student will be asked to complete a course/instructor evaluation form toward the end of the semester.

### **CLASSROOM RULES OF CONDUCT**

Each student is expected to be fully acquainted and comply with all published policies, rules, and regulations of Sam Houston State University. Students are also expected to comply with all federal and state laws.

Section 5.2.22 of the Code of Student Conduct and Discipline defines that campus disruptive activities or disorderly conduct on component-owned or controlled property or at a component-sponsored or supervised function that inhibit or interfere with the educational responsibility of the component community or the component's social-educational activities shall include but not be limited to: using abusive, indecent, profane or vulgar language; making offensive gestures or displays that tend to incite a breach of the peace; perpetrating fights, assaults, acts of sexual violence, abuse, or threats; or evincing some obviously offensive manner or committing an act that causes a person to feel threatened. Such prohibition includes disorderly classroom conduct that obstructs, interferes with, inhibits and/or disrupts teaching and/or related classroom activities.

**All cell phones should also be turn off or put in silent mode during the class.**

### **COURSE OUTLINE AND ASSIGNED READINGS**

- Topic 1        Steps in Social Research Process and Learning SPSS 15.0 for Windows  
(Read: Lecture Notes: Topic 1; Norušis, Chapters 1, 2 and 3)
  
- Topic 2        Descriptive Statistics and Standard Normal Distribution  
(Read: Lecture Notes: Topic 2; Norušis, Chapters 4, 5, 6, 7 and A)
  
- Topic 3        Sampling Distribution and Hypothesis Testing  
(Read: Lecture Notes: Topic 3; Norušis, Chapters 10 and 12)
  
- Topic 4        Correlation and Partial Correlation Analysis  
(Read: Lecture Notes: Topic 4; Norušis, Chapter 20)
  
- Topic 5        Simple Linear Regression  
(Read: Lecture Notes: Topic 5; Norušis, Chapters 20, 21 and 22; Kahane, Chapters 1,2 and 3)

\*\*\*\*\*Midterm Exam (March 3, 2008)\*\*\*\*\*

Topic 6 Multiple Regression  
(Read: Lecture Notes: Topic 6; Norušis, Chapters 23 and 24; Kahane, Chapters 4, 6 and 7)

Topic 7 Multiple Regression with Nonlinear and Dummy Independent Variables  
(Read: Lecture Notes: Topic 7; Kahane, Chapter 5)

Topic 8 Logistic Regression  
(Read: Lecture Notes: Topic 8; Menard, Chapters 1, 2,3 and 4)

\*\*\*\*\*Final Exam ( May 12, 2008)\*\*\*\*\*