**SOCIAL STATISTICS**

**SOC 3112-001,**

**Summer 2013,**

**04 Credits**

Time : M/W, 10:45 am – 12:05 pm Lab: W, 12:35-1:25 pm

Location : BEH S 110 Location: BEH S 101

Instructor : Ha Trinh, M.S.

Email : ha.trinh@soc.utah.edu

Office: BEH S 423

Office Hours : M/W 9:30-10:30 am or by appointment

* **Course Overview**

**Course Summary**

This course fulfills the Quantitative Reasoning (QB) and Quantitative Intensive (QI) requirement of the University of Utah. Basic algebra knowledge is required.

This course introduces you to the world of empirical research for social sciences. It aims at providing you the abilities to calculate and interpret statistics in social context. Strong quantitative skills will assist you not only in academic success but also in your daily activities.

There will be three sections in this class. First, we will start with descriptive statistics, namely frequency distribution, measures of central tendency and variability. Second, we will move on to basic inferential statistics and drawing conclusion about the population. Finally, we will study how to describe relationship between variables, including measure of association, correlation and bivariate regression.

**Course Objectives**

By the end of this course, you will be able to:

* Calculate descriptive statistics
* Calculate inferential statistics
* Measure relationship between variables
* Interpret statistics within the context of social sciences
* Communicate in team-work, and in-class activities for statistic calculation and interpretation
* Employ Statistical Package for Social Sciences (SPSS) for research project
* Integrate social statistics in individual research project
* Develop skills to present your research project

**Required Text and Material**

Frankfort-Nachmias, C. and A. Leon-Guerrero. 2010. *Social Statistic for a Diverse Society*. 6th Edition. Sage Publications. (Older versions should be fine)

Calculator (with square-root function)

**Teaching and Learning Methods**

* This course will be divided into lecture, practice and lab session. Theory (covered in lecture) and practice will be during class time. I will use the practice time to help you work on your homework assignments, or practice problem sets. Since this course content is *very intense*, I expect you to pay attention and engage in class activities to help you save time and effort doing homework or exam reviewing.
* Lab hours are for SPSS learning and practice. I expect you to utilize your lab hours to integrate the lecture with your final research project. I also encourage you to share your comments/question with me and other students in class or during lab hours.
* In this course you will be asked to perform individual and group’s tasks. Individual tasks will help you practice statistic calculation while group activities will help you interpret those numbers and how to work in a team.
* Any resource needed in this course will be available on your canvas. Be sure to check you U-mail or canvas regularly for update and class announcement.

**Policies**

* *Attendance:* Class attendance is a crucial component to success in this class. I will take attendance *randomly* through group activities. Make sure when you go to class, join some group work and write down your name on a piece of paper for your participation credit.
* *Punctuality:* I would appreciate if no one shows up late. For some reasons you’re late for the class, please respect me and other students.
* *Food & Drink:* No food is allowed in classroom and computer lab. Water and soft drink are okay in class but not in computer lab.
* *Technology/Cyber Vices:* Cell phone must be on silent/vibration only. You can use laptop/computer to take note in class or lab. No laptop/computer and cell phone allowed on test day.
* *Late Work:* No late work or make up exam excepted unless you acknowledge me beforehand.
* *Reading assignment:* You will find much of the material covered in this course *overwhelming*. Reading the text before the class will help you understand the lecture and participate in group activities.
* *Review Session:* You can, *collectively* as a group, request a review session to help you study for the exam if the class designated for exam preparation does not serve you well. Also, at the end of the semester, extra lab hours will be set up based on request for research project assistance.
* **Student Support Resources**

**Americans with Disabilities Act (ADA) Statement**

The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to the Center for Disability Services. (www.hr.utah.edu/oeo/ada/guide/faculty/)

**Wellness Statement**

Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student’s ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness - www.wellness.utah.edu; 801-581-7776.

[Additional Resources – There are many fabulous resources on campus that you may wish to list, depending on your course, Department, College or School (e.g., Veteran’s Center, Counseling Center, LGBT Center, International Center, ESL Program, Women’s Resource Center, etc.). Consider doing some research for your own purposes and then include links to center websites as needed.]

**Technology**

We will be using SPSS in our class to explore descriptive, inferential statistics, relationship between variables, and measures of association. SPSS is available in any computer lab on campus. You can also access SPSS from Remote Desktop: <https://apps.csbs.utah.edu/Citrix/XenApp/auth/login.aspx>. Remote Desktop will allow you to access to SPSS and other computer software off campus using your student ID and password. To enjoy full functions of SPSS, you can purchase premium version from IBM (not suggested).

* **Assessments**

**Homework (10 points each): 10%**

There will be a total of seven homework assignments. Homework can be found at the end of each chapter assigned as reading material. However, you are not required to complete the whole chapter exercise. I will assign you which questions to work on. Normally I will combine questions of two chapters as homework assignments. Announcement on your homework will be posted on canvas. You are expected to turn in homework in class on the date shown below in the class Schedule rubric.

**Group Activities/Attendance/Participation (10 points each): 10%**

Once a week, either Mon or Wed, I will randomly collect attendance or participation through your group activities. You will have a total of 10 group activities graded as your attendance or participation.

**In class Exams (100 points each): 30%**

There will be three 80 minute in class exams. You’re allowed to bring a calculator with square-root function and one sheet of note.

**Final Paper (100 points total: 80 points for Final Paper, 20 points for Topic Approval): 30%**

At the end of the class you will turn in a five to seven page (Times New Roman, 12, doubled space) research paper including text, tables, graphs, figures, appendices (if necessary) and citation. Your research paper should demonstrate what we study in our class by: 1. Using the given data sets to test a hypothesis, 2. Choosing correct statistical techniques, 3. Employing SPSS to explore data, 4. Interpret the results. Paper submission will be available on canvas.

In the middle of the semester, you’re expected to turn in one page of **Research Paper Topic Approval** (Times New Roman, 12, doubled space) through canvas. This paper includes: topic, research question, proposed statistic techniques and other information (if necessary). I will give you feedback from this paper to make the best of your final research project.

**Labs (10 points each): 10%**

There will be ten labs throughout the semester. Lab instruction and data sets (General Social Survey and World Bank data) will be available on your canvas. At the end of the lab hour, you’re expected to turn in your work in canvas to earn your lab credit.

**Extra Credit (55 points max): 10%**

Extra credit is available in multiple ways: 1. Your exam (5 points each exam), 2. Volunteer to solve problems during practice session (5 points each time, 5 times max), 3. Leading group activities (5 points for all group members each time, 3 times max).

**Grading Scale**

93-100%: A 87-89%:B+ 77-79%: C+ 67-69%: D+ 0-59%: E

90-92%: A- 83-86%: B 73-76%: C 63-66%: D

80-82%: B- 70-72%: C- 60-62%: D

Grades will not be curved.

* **Tentative Class Schedule**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ****Date**** | ****Content**** | ****Reading Assignment****  ****(read for this date)**** | ****Assignment Due****  ****(due on this date)**** | ****Lab**** |
| Descriptive Statistics | | | | |
| 5/13 | Syllabus & Introduction |  |  |  |
| 5/15 | The What & Why of Statistics | Chapter 1 |  | Lab 1: Introduction to SPSS |
| 5/20 | Frequency Distribution | Chapter 2 | Exercise 1 |  |
| 5/22 | Frequency Distribution (cont.)  Graphic Presentation | Chapter 3 |  | Lab 2: Frequency and Graphs |
| 5/27 | **No Class: Memorial Day** |  |  |  |
| 5/29 | Measure of Central Tendency | Chapter 4 | Exercise 2 | Lab 3: Measure of Central Tendency |
| 6/3 | Measure of Variability | Chapter 5 |  |  |
| 6/5 | **Exam 1 Prep** |  |  | Lab 4: Measure of Variability |
| 6/10 | **Exam 1** |  |  |  |
| Inferential Statistics | | | | |
| 6/12 | Normal Distribution | Chapter 10 |  | Lab 5: Normal Distribution |
| 6/17 | Sampling and Sampling Distribution | Chapter 11 | Exercise 3 |  |
| 6/19 | Estimation | Chapter 12 | **Final Paper**  **Topic Approval** (due at 11:55pm) | Lab 6: Sampling Distribution & Estimation |
| 6/24 | Testing Hypotheses | Chapter 13 | Exercise 4 |  |
| 6/26 | Chi-Square Test | Chapter 14 |  | Lab 7: Hypothesis Testing |
| 7/1 | **Exam 2 Prep** |  |  |  |
| 7/3 | **Exam 2** |  |  | Lab 8: Chi-Square Test & Cross-Tabulation |
| Relationship Between Variables | | | | |
| 7/8 | T-test | Chapter 16 | Exercise 5 |  |
| 7/10 | ANOVA | Chapter 17 |  | Lab 9: T-test & ANOVA |
| 7/15 | Cross-Tabulation | Chapter 6 | Exercise 6 |  |
| 7/17 | Bivariate Correlation | Chapter 8 |  | Lab 10: Correlation & Regression |
| 7/22 | Bivariate Regression | Chapter 8 | Exercise 7 |  |
| 7/24 | **No Class: Pioneer Day** |  |  |  |
| 7/29 | **Exam 3 Prep** |  |  |  |
| 7/31 | **Exam 3** |  |  | Lab 11 (tentatively): Final Paper Assistance |
| 8/2 | **Summer Semester Ends** |  | **Final Paper** (due at 11:55pm) |  |

*Revised: February 19, 2013*