

## SC200: STATISTICS

Fall, 2005

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This course provides an introduction to the use of statistics for social science data analysis. Students are expected to develop an understanding of commonly used descriptive and inferential statistics and to become competent in the use of the Statistical Package for the Social Sciences (SPSS) software.

Course **REQUIREMENTS** include:

(a) Three 75-minute quizzes (50%). Four quizzes will be given, however only your three best scores will count. Make-up quizzes will **NOT** be given; if you miss one quiz, it will be the one that is not counted. A second missed quiz will count as a zero, unless **BOTH** absences are due to serious, documented, medical reasons, or upon my receipt of a written excuse from a Dean's Office. Each quiz will cover about a 3-week period of the course. Hand calculators may be used. I will give you a one-week notice before each quiz, but **IT IS YOUR RESPONSIBILITY TO KNOW WHEN EACH QUIZ WILL BE GIVEN**. The quiz dates below are estimated dates, and I will try to stick closely to the dates listed.

b) A final exam (25%). The final will be cumulative, covering the entire course. The final exam will be on the day/time set by the registrar: **THURSDAY, DEC. 15 AT 9:00 AM. THERE WILL BE NO EXCEPTIONS!** Do not ask for an alternative date. Do not buy airline tickets for an early departure. If you must get sick on that date, get very, very sick.

(c) Homework assignments (25%). There will be 7-9 homework assignments; these will require work with SPSS. These are due on the date assigned; late submissions will be penalized 10% for each calendar day late – **NO EXCEPTIONS!**

**IMPORTANT:** Do keep a copy of all of your work. Do retain all of the work that is returned to you until after you have received your final course grade.

### **READINGS:**

The following **REQUIRED** text is available at the B.C. Bookstore:

Joseph F. Healey: *STATISTICS* (7th edition).

Also available in the Bookstore is an **OPTIONAL** text; I suggest this for those who want to understand the SPSS software more completely:

Marija Norusis: *SPSS 12.0 GUIDE TO DATA ANALYSIS* (or version 11.0 or 10.0)

The following are **SUPPLEMENTS** to the required readings and are on reserve in O'Neill:

Michael Malec: *ESSENTIAL STATISTICS FOR SOCIAL RESEARCH* (2nd ed.)

Jack Levin & James Fox: *ELEMENTARY STATISTICS IN SOCIAL RESEARCH* (5th ed. or later). A shorter version, subtitled *THE ESSENTIALS*, is also useful.

There are many other fine introductory texts. If one book doesn't "work" for you, do try another.

**THE CLASSROOM IS A NO-CELL-PHONE ZONE. PLEASE TURN OFF ALL THINGS THAT RING, BEEP, OR OTHERWISE INTRUDE.**

**TENTATIVE COURSE OUTLINE** (Actual dates may vary)

**WEEK OF:**

**TOPIC AND READINGS**

Sept. 6 Introduction  
READ: Healey, Chs. 1-2. ; Norusis, Chs. 1 and 2.  
Optional: Malec, Chs. 1-2; Levin, Ch. 1-3; pp. 442-452 (skim)

Sept. 13, 20 Centrality and Dispersion  
READ: Healey, Ch. 3-5; Norusis, Ch. 5  
Optional: Malec, Chs. 3-4; Levin, Chs. 4 and 5

**(QUIZ 1 on about Thursday, Sept. 29)**

Sept. 27. Oct. 4 Sampling and Estimation  
READ: Healey, Chs. 6-7; Norusis, Ch. 11  
Optional: Malec, Chs. 6; Levin, Ch. 7

Oct. 11, 18 Probability; Hypothesis Testing; t-test  
READ: Healey, Chs. 8-9; Norusis, Ch. 14  
Optional: Malec, Ch. 5 and 7; Levin, Ch. 6 and 8

**(QUIZ 2 on about Thursday, Oct. 27)**

Oct. 25, Nov. 1 One Way Analysis of Variance  
READ: Healey, Ch. 10; Norusis, Ch. 15  
Optional: Malec, Ch. 8; Levin, Ch. 9

Nov. 8, 15: Measures of Association (Nominal Level)  
READ: Healey, Chs. 11-13; Norusis, Ch. 17  
Optional: Malec, Ch. 9; Levin, Ch. 10 and pp. 358-379

**(QUIZ 3 on about Thursday, Nov. 17)**

Nov. 22 Measures of Association (Ordinal Level)  
READ: Healey, Ch. 14; Norusis, Ch. 19  
Optional: Malec, Ch. 10; Levin, Ch. 13 (to p. 358)

**Nov 24: No class – Thanksgiving**

Nov. 29, Dec. 6 Measures of Association (Interval Level)  
READ: Healey, Ch. 16; Norusis, Ch. 20  
Optional: Malec, Ch. 11-12; Levin, Chs. 12 and 14

Dec. 6

Last day of class: Review

**(QUIZ 4 on about Thursday, Dec. 8)**

**THE FINAL EXAM WILL BE GIVEN ONLY ON THE DATE ASSIGNED BY THE  
REGISTRAR, THURSDAY, DEC. 15 AT 9:00 AM.  
THERE WILL BE NO MAKE-UP EXAM.**