

SC200: STATISTICS
Spring 2012

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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 documented medical reasons, or upon my receipt of written excuses 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; I will try to stick closely to the dates listed, but I cannot guarantee the dates until one week prior to a quiz.

b) A final exam (25%). The final will be cumulative, covering the entire course. The final exam is held on the day/time set by the Registrar: Thursday, MAY 10 AT 9:00 AM. **THERE ARE NO EXCEPTIONS!** Do not ask for an alternative date. Do not buy airline tickets for an earlier 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!**

VERY IMPORTANT: Do keep a copy of all of your work. Do retain all of the work that is returned to you (homework and quizzes) until after you have received your final course grade.

TEXTS:

The following **REQUIRED** text is available at the BC Bookstore:

Joseph F. Healey: *THE ESSENTIALS OF STATISTICS* (Belmont, CA: Thomson Wadsworth, 2007).

RECOMMENDED: Elliot T. Berkman and Steven P. Riese, *A CONCEPTUAL GUIDE TO STATISTICS USING SPSS* (Los Angeles: Sage, 2012)

ALSO RECOMMENDED: You might also want to download the "SPSS Brief Guide 19.0.pdf" from this web page:

https://download.bc.edu/applications/research/PASW/manual/IBM_SPSS_Statistics_19_Brief_Guide.pdf

The "Brief Guide" can be used as a reference manual later in the course. NOTE: The 'Brief Guide' has 171 pages, so you may not want to print it. The Guide is also available on Blackboard Vista.

Boston College has a site license that allows students to use SPSS for one year on their own machines. To download SPSS 19, you will need to authenticate through this website:

<http://www.bc.edu/software/applications/research/spss.html>

Also, note that you will need to access the installation document by clicking, "Learn how to install and license," for either Windows or Mac, in order to obtain the authorization code to license the software for use. Students may only install the software only on their own computers, and not on machines owned by another educational institution, hospital, school, company, or agency. SPSS 19 users should also download the patch 19.0.0.1.

The instructions for the patch download are detailed in the last few pages of each set of download instructions and Windows 7.

Finally, NOTE that no version of SPSS is currently supported on Mac OS10.7 (Lion). While SPSS 19 is validated for use for all previous releases of the MacOS and all current Windows systems, until SPSS releases a new patch, Mac OS 10.7 users will have no choice but to use SPSS through a BC remote server system (apps.bc.edu) on their computers. This remote server is operated through a Citrix client as cutting edge cloud computing, and once installed on their computer, will allow anyone within the BC community to remotely access a server through the internet to use a number of different software, including SPSS 19.

The following books are on reserve in O'Neill:

- Marija Norusis: *SPSS 17.0 (or 18.0 or 10.0) GUIDE TO DATA ANALYSIS*
Prentice-Hall 2008 HA32/N67222
- Marija Norusis: *SPSS 16.0 (or 17.0 or 19.0) STATISTICAL PROCEDURES
COMPANION* HA32. N6526
- John Kulas, *SPSS ESSENTIALS* (Josey-Bass, 2009) HA32.K85
- Nancy Leech et al., *SPSS FOR INTERMEDIATE STATISTICS* (3rd ed.) HA32.L444
- J. Levin & J. Fox, *ELEMENTARY STATISTICS IN SOCIAL RESEARCH*
(Pearson 2004) HA29.L388
- GENERAL SOCIAL SURVEYS: CUMULATIVE CODEBOOK HN29.N33
- T. Smith and B.J. Arnold, *ANNOTATED BIBLIOGRAPHY OF PAPERS
USING THE GENERAL SOCIAL SURVEY* HA155.S55

TENTATIVE COURSE OUTLINE (Actual dates may vary)

- | WEEK OF: | TOPIC AND READINGS |
|--|---|
| Jan. 17 | Introduction; SPSS and GSS
READ: Healey, Chs. 1-2; Optional: Berkman, Ch. 1;
Malec, Chs. 1-2 |
| Jan. 2, 31, Feb. 7 | Centrality and Dispersion
READ: Healey, Ch. 3-5; Optional: Berkman, Ch. 2; Malec,
Chs. 3-4. |
| (QUIZ 1 on or about Thursday, Feb. 9) | |
| Feb. 16, 23, March 13 | Probability, Sampling, and Estimation; the normal curve; z-
scores; hypothesis testing; the t-test
READ: Healey, Chs. 6-9; Optional: Berkman, Ch. 5;
Malec, Chs. 5-7 |

NO CLASS MARCH 6 OR 8: SPRING VACATION

(QUIZ 2 on or about Thursday, March 15)

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| March 20, 27: | Analysis of Variance
READ: Healey, Ch. 10; Optional: Berkman, Ch. 6; Malec,
Ch. 8 |
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April 3, 10 Measures of Association (Nominal Level)
 READ: Healey, Chs. 11-12; Optional: Berkman, Chg. 3;
 Malec, Ch. 9

NO CLASS ON APRIL 5: EASTER VACATION

April 17, Measures of Association (Ordinal Level)
 READ: Healey, Ch. 13; Optional: Malec, Ch. 10

(QUIZ 3 on or about Thursday, April 15)

April 24, May 1 Measures of Association (Interval Level)
 READ: Healey, Chs. 14-15; Optional: Berkman, Ch. 4;
 Malec, Ch. 11-12

(QUIZ 4 on or about Thursday, May 3)

**THE FINAL EXAM WILL BE GIVEN ONLY ON
THE DAY SET BY THE REGISTRAR:
THURSDAY, MAY 10 AT 9:00 AM.
THERE WILL BE NO MAKE-UP EXAM.**

**AT ALL TIMES, THE CLASSROOM IS A NO CELL PHONE ZONE.
PLEASE TURN OFF ALL THINGS THAT RING, BEEP,
OR OTHERWISE MIGHT INTRUDE.
(This includes laptop computers, unless you have my specific permission.)**

ACADEMIC INTEGRITY

It is your obligation to be fully aware of the Boston College policies on academic honesty. ANY violation may subject the offender to severe penalty, including course failure. If you are not familiar with the Boston College policy on academic honesty, see:

<http://www.bc.edu/offices/stserv/academic/resources/policy.html#integrity>