

FALL, 2013 – COURSE INFORMATION SHEET – RESCH-GE.2001

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Meeting Times/Location:

The course meets on Wednesdays from 2:00 to 4:45pm in Room LC19, TISCH HALL.

Prerequisites:

A course in high school algebra.

Course Goals:

Designed as a two-semester sequence for doctoral students, this course introduces students to the tools of data analysis as applied to quantitative data using SPSS and also STATA. Particular topics covered this semester are listed in the course syllabus.

Course Orientation:

This course provides a conceptually oriented, nonmathematical approach to learning applied statistics. It is not appropriate for students seeking to learn the mathematical theory underlying these statistical techniques.

Course Materials:

Website: Handouts, lecture notes, readings, homework assignments, project assignments, and general information will be posted under *Resources* on our My Classes course website.

Required Text: *Statistics Using SPSS: An Integrative Approach* (2nd edition) by Weinberg, S. L. and Abramowitz, S. A. (2008), Cambridge University Press. The text is available in the NYU Book Store. An Errata Sheet is posted under *Resources* on our course website. I would recommend that you print a hard copy of the Errata Sheet and refer to it before reading assigned passages in the book so as to avoid unnecessary confusion as you read.

Power Point Slides: Are posted on our course website. Although I will not be using them during lectures, they highlight important points of each lecture and, as such, may be useful in helping you to identify which topics from each lecture are particularly important. They may also be helpful in organizing your studying for the midterm and final.

Supplementary Readings: As posted on our course website.

Computer Labs:

NYU offers a Virtual Computer Lab (VCL) to all NYU degree-seeking students with active e-mail accounts. Students who qualify will see the VCL channel on the **Academics** tab in NYUHome. To access the VCL: Log into NYUHome (home.nyu.edu); Select the **Academics** tab, then scroll down until you see the "Virtual Computer Lab" channel; Click **VCL Log In**; Once on the VCL page, click **Log Into the VCL Now!**; Enter your **NetID** and **password**; Click **Log In**. **Note:** The first time you log into the VCL, you will be prompted to install the Citrix ICA plug-in.

Both SPSS (version 20) and STATA (version 11) are available through the VCL.

In addition, as a student in this class you have priority access to the computer labs which means that you may enter the labs at any time by swiping your ID.

SPSS version 20 is available at the following computer labs:

Kimball Hall, 3E (Windows) [This lab does not require swiping your ID]
Fourth Street Academic Technology Center (Mac and Windows)
Washington Place Technology Center (Mac and Windows)
Third Avenue (Mac and Windows)
Kimmel Center (Mac and Windows)

STATA (version 11) is available at all of the above computer labs, but for Kimball Hall, and a Mac version is not available at Third Avenue.

For a current list of software available by location, please see the [ITS Software Applications by Location](#) page.

Also, a tip about using SPSS: When you are using multiple computers with different versions of SPSS, opening old output files does not always work. To avoid being unable to open an output file from an analysis performed earlier, copy and paste your output into a word document and then save a digital copy of that document.

Course Requirements & Grading:

Homework: Practicing what has been covered in class is essential to learning statistics. Homework will be assigned, collected, and graded each week. All students are responsible for completing all homework assignments on time and raising related questions in class. See *Homework Guidelines* under the *Resources* tab on our class website for procedures regarding the format and handing in of homework assignments.

Project: Students are expected to complete a project that requires the selection of appropriate statistical methods to answer a series of questions based on a given data set made available by the instructor and to interpret and communicate findings in a journal-like format. Analyses based on the use of both SPSS and STATA will be required.

Exams: There will be one midterm and one cumulative final.

Grading:

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| 25% | Homework |
| 25% | Midterm Exam |
| 25% | Final Exam |
| 25% | Project that requires the analysis of data and the communication of results in the form of a journal-like article. |

Syllabus:

| <i>Fall, 2013 – RESCH-GE.2001 Syllabus -- Statistics for the Behavioral and Social Sciences I</i> | | |
|---|------------|---|
| <i>Month</i> | <i>Day</i> | <i>Topic</i> |
| September | 4 | Overview & introduction to SPSS: Chapter 1; Handout on STATA; Examining univariate distributions: Chapter 2 |
| | 11 | Examining univariate distributions: Chapter 2, cont'd; Measuring location, spread, & skewness: Chapter 3 |
| | 18 | Re-expressing variables: Chapter 4; Bivariate relationships: Chapter 5; |
| | 25 | Bivariate relationships, cont'd: Chapter 5; Simple linear regression: Chapter 6 |
| October | 2 | Review Chapter 1 thru 6 for the MIDTERM |
| | 9 | MIDTERM EXAM: Chapters 1 thru 6 |
| | 16 | RETURN MIDTERMS; Probability fundamentals: Chapter 7; |
| | 23 | Theoretical probability distributions: Chapter 8 |
| | 30 | The role of sampling: Chapter 9 |
| November | 6 | The role of sampling, cont'd: Chapter 9 |
| | 13 | Hypothesis testing using the z-test: Chapter 10 |
| | 20 | Inferential tests on means: Chapter 11 |
| | 27 | NO CLASS -- Day Before Thanksgiving |
| December | 4 | Inferential tests on means, cont'd: Chapter 11; GPOWER |
| | 11 | LAST CLASS; Review for the FINAL EXAM – Chapters 1 – 11; PROJECTS ARE DUE |
| | 18 | FINAL EXAM |