

Basic Statistics, RESCH-UE 1085, SPRING 2014

Steinhardt School, New York University

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Prerequisites:

A firm understanding of math up to high school algebra and basic computer skills are required. If you think you may not meet these requirements please see Professor Middleton as soon as possible.

Course Text:

The required text for this course is "Intro Stats" by De Veaux, Velleman and Bock, 3rd or 4th edition. Also recommended: "Statistics Using SPSS: An Integrative Approach" by Weinberg and Abramowitz.

Evaluation:

- Online quizzes (due every class day before the start of class) and pop-quizzes (in class) - 10%
- Attendance Class and Lab – 20%
- Midterm Exam – 35%
- Final Exam – 35%

Accommodations:

NYU is committed to facilitating equal access for students with disabilities, including hearing and visual impairments, mobility impairments, learning disabilities and attention deficit disorders, chronic illness, and psychological impairments. If you are not comfortable discussing your needs with me, I encourage you to contact the Moses Center on 240 Greene Street, 2nd Floor, 212-998-4980, for assistance in ensuring that you receive any necessary accommodations.

Course Structure:

This is not a typical lecture-style class. *Before* each class, there will be an assignment, listed in the Lessons section of Classes. Each assignment will require you to: (1) read the book and take notes; (2) watch the lecture video and work the example problem presented in the video; (3) complete the short online quiz for credit. I also recommend that you prepare questions to ask during the class period.

Class time will be used to work on problem sets with the professor and your peers to help you. You will turn in your in-class assignment at the end of the course so that I can monitor your progress.

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Sufficient effort will receive full credit for that day's participation, though correct answers and full completion may not be required depending on the difficulty and length of the assignment.

You are to bring your notes from the book to each class. Periodically, you may have to produce your notes to get full credit for class participation. Also, pop quizzes may occur at any time and you can use your notes on these quizzes, but not the book.

Note, there will be no instruction during class time to catch you up if you did not do the reading. You must come prepared, having read and watched the lecture video

The Classes website will help you to keep track of what your weekly assignments are. Everything on the Classes site is organized around the Lessons section.

How to Succeed in this Class:

Successful students in this course read the assigned chapters and take notes. You are capable of mastering the course material. Especially in this class however, there is a necessary amount of time you will have to study and read the book before coming to class. Lecture and lab sections are not sufficient to master everything you need to know.

Statistics is better learned together, so I encourage you to work together on in-class assignments and when studying for exams. Study partners help to reduce stress, keep you on schedule, and speed up the learning process. And when you explain the material to others, you understand it better yourself.

Most importantly, to do well you must actively engage with the ideas – this likely requires struggling and grappling. Many statistical concepts are confusing when first presented, and you should not expect statistics to come easily without some dutiful attention to the material. Students who do well embrace these challenges, keep on top of assignments and spend time studying.

Course Policies:

I do not give credit for late quizzes. Exceptions can be granted for illness or other extenuating circumstance (with a doctor's or university administrator's note), or if you have a disability. Conflicts due to religious observances may also be acceptable.

Lab and class participation is mandatory and work will be collected and your progress monitored. These will not be graded, but they should be complete for full participation credit. Lab is a great place to ask clarifying questions, get help with SPSS and work sample problems in preparation for the homework.

I do not change grades unless there was a clerical error. This is the best way I can be fair to all students.

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Class	Material	3rd edition	4th edition
Class 1: January 27	Course overview, course strategies		
Class 2: January 29	Data	Chapters 1-2	Chapter 1
Class 3: February 3	Displaying and Describing Categorical Data	Chapter 3	Chapter 2
Class 4: February 5	Displaying and Summarizing Quantitative Data	Chapter 4	Chapter 3
Class 5: February 10	Understanding and Comparing Distributions	Chapter 5	Chapter 4
Class 6: February 12	The Standard Deviation as a Ruler for the Normal Model	Chapter 6	Chapter 5
February 17	NO CLASS (President's Day)		
Class 7: February 19	The Standard Deviation as a Ruler for the Normal Model (again)		
Class 8: February 24	Scatterplots, Association, and Correlation	Chapter 7	Chapter 6
Class 9: February 26	Linear Regression	Chapter 8	Chapter 7
Class 10: March 3	Regression Wisdom	Chapter 9	Chapter 8
Class 11: March 5	Sample Surveys	Chapter 12	Chapter 10
Class 12: March 10	Experiments and Observational Studies	Chapter 13	Chapter 11
Class 13: March 12	Understanding Randomness	Chapter 11	Chapter 9
SPRING BREAK			
Class 14: March 24	From Randomness to Probability	Chapter 14	Chapter 12
Class 15: March 26	Probability Rules	Chapter 15	Chapter 13
Class 16: March 31	MIDTERM REVIEW		
Class 17: April 2	MIDTERM		
Class 19: April 7	Sampling Distribution Models	Chapter 18	Chapter 15
Class 20: April 9	Confidence Intervals for Proportions	Chapter 19	Chapter 16
Class 21: April 14	Testing Hypotheses for Proportions	Chapter 20	Chapter 17
Class 22: April 16	More About Tests	Chapter 21	Chapter 19
Class 23: April 21	Comparing two Proportions	Chapter 22	Sections 20.1, 20.2, 20.3, 20.4, 20.7
Class 24: April 23	Inferences about Means	Chapter 23	Chapter 18
Class 25: April 28	Comparing Means	Chapter 24	Sections 20.1, 20.5, 20.6, 20.8, 20.9
Class 27: April 30	Comparing Counts	Chapter 26	Chapter 22
Class 26: May 5	Inferences about Regression	Chapter 27	Chapter 23
Class 27: May 7	MAKE UP CLASS		
Class 28: May 12	FINAL REVIEW		
FINAL	TBD (check Albert for room and time)		