

**Statistical Thinking
Northeastern University
MTH U180 Spring 2005**

Class: Tuesday, Friday 11:45-1:25 in 302 KA

Text: *Statistics* by Freedman, Pisani, Purves (3rd edition)

Instructor: Joshua Sattin, office: 550 NI, phone: 373-5769, email: sattin.j@neu.edu

Office Hours: Tuesday 1:30-4:30, or by appointment

Outline: The aim of the course is to introduce the student to the statistical method of thinking and to gain an appreciation of the role of statistics in the world today. This is not a how-to manual course, with a lot of statistical calculations. It is a course to enable the student to develop adequate insight into the concepts and limitations of statistical techniques. The student will then be better prepared to read and interpret articles involving statistics whether in journals or newspapers.

The course is divided into three main sections.

I. Collecting Data - How do you collect data whether it is a poll, survey or experimental program?

II. Organizing Data - Once you have the data, how do you present it? We will investigate the one and two variables cases.

III. Conclusions from Data - What inferences can you draw from the sample to the population?

The sections we will cover will depend on available time but might include Chapters 1-5, 8-13, 16-21, 23, 24, 26, and 27. These sections include collecting data, correlation and regression, basic probability, confidence intervals, and hypothesis testing.

Calculator: You will need at least a basic calculator (you will need a square root key).

Grades:	Papers:	20%
	Quizzes/Tests:	40%
	Final (cumulative):	40%

Course Coordinator: John Lindhe, office: 541 NI, phone: 373-5534, email: j.lindhe@neu.edu

It is your responsibility to be aware of any changes the instructor may make to the syllabus as they are announced in class. Students are responsible for all information given when they are absent.

If you have a concern about the course or the instructor that is not or cannot be resolved by speaking with the instructor, the next step is to speak with the course coordinator. If the course coordinator does not settle the matter, please contact Professor D. King (the vice chair), 447 LA, x5679, donking@neu.edu.

It is University policy that no grade, including an incomplete, can be changed after one year. Exceptions must be authorized by the Academic Standing Committee.

The final will be cumulative. The date for the final has been tentatively set for Tuesday April 19 at 10:30am. The date of the final may change and you should be prepared to be on campus until the last day of final's week. All students without legitimate conflicts (approved by the instructor) will take the final exam at the scheduled time. Do not make travel plans that conflict with the final exam.