Course Syllabus
Math U180–2
Statistical Thinking Summer 2, 2005

Time: MTWR 9:50am – 11:30am 435 Ryder Hall

Text: Statistics, 3rd edition.
by Freedman, Pisani, and Purves

Instructor: Dean Serenevy
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Office Hours: MT 8:30am – 9:45am *and by appointment*

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.

⋆ If you are unclear on something in class, ask a question! ⋆
⋆ Be actively involved in your education — it is why you are here. ⋆

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

Evaluation: There will be a writing project, a midterm and a final examination. On the first day of class we will discuss the possibility of also having two tests (one before, and one after the midterm) to better distribute the graded materials. Your final grade will be determined by the following score distribution.

	testless option	test option
Project	30%	20%
Midterm	30%	20%
2 Tests		20%
Final Exam	40%	40%

Final grades will be assigned according to the following percentage guidelines.

A	93–100%	B	80–84%	C	67–71%	D	54–58%
A−	89–92%	B−	76–79%	C−	63–66%	D−	50–53%
B+	85–88%	C+	72–75%	D+	59–62%	E	0–49%

Final: The final examination will be cumulative. You will not be able to take the final at a separate time unless you have a legitimate conflict (This would include having another final scheduled at the same time or three finals on the same day. It would NOT include early travel plans.)

Project: The project will be a more involved problem that will incorporate multiple concepts. It will be much larger than the problems out of the book and will need to be neat, clear, and well explained. The projects will need to be typewritten, but math formulas, equations and diagrams may be written in by hand if done neatly. The project will be graded on three criteria.

- Mathematical Correctness
- Mathematical Clarity
- Written Clarity

Office Hours: Please come to my office hours for help. This gives me the opportunity to focus on specific problems you may be having and to explain things in a more personal manner. If the scheduled times are bad for you, make an appointment with me.

Dropping a Class: Students may drop any class without penalty or permission through Friday 8 July. Students may withdraw from a course without permission through Friday 29 July. In this case a "W" grade will be recorded on the academic record and applicable tuition and fees will be assessed. Students may appeal withdrawal deadlines in case of compelling, non-academic emergencies by submitting a petition and supporting documentation to the office of the dean of their major college. The complete withdrawal policy is printed in the University class schedule.

The Americans with Disabilities Act requires that reasonable accommodations be provided for students with physical, cognitive, systemic, learning and psychiatric disabilities. Please contact me at the **beginning** of the semester to discuss any such accommodations for this course.

24-Hour Policy: I will not discuss grades on a particular assignment until my office hours. Let me know that you will be coming to visit me and which problem is in question. That way we can both re-evaluate our solutions before meeting.

Course coordinator If you have any concerns about the course or my instruction, please first try to resolve them with me. You should also feel free to speak with the course coordinator John Lindhe (541 NI; 617-373-5534; j.lindhe@neu.edu).