Math 234: Course Syllabus – Spring 2013

**Course logistics:**
- **Time and Location:** Tuesday & Thursday 3:30pm – 4:45pm, 251 Mercer St., CIWW 517
- **Instructor:** Michael O’Neil
- **Email:** oneil@cims.nyu.edu
- **Phone:** 212-992-5874
- **Office:** Room 1105A, Warren Weaver Hall
- **Office hours:** Thursday 11:00am – 1:00pm
- **Course website:** See NYU Classes

- **Recitation time:** Friday 2:00pm – 3:15pm, 25 W. 4th St., C-8
- **Teaching assistant:** Alex Rozinov
- **Email:** ar1855@cims.nyu.edu

**Course information:**
- **Description:** This course is intended as a thorough mathematical introduction to the theory of statistics, intended to be taken after sufficiency in probability is obtained at the level of Math 233: Theory of Probability. Topics covered in this class will include: sampling theory, hypothesis testing, point (parameter) estimation, regression and linear least squares, the bootstrap, tests of significance, likelihood methods, and an intro to Bayesian statistics. The course will mainly focus on analytical approaches, but will contain computational aspects of statistics such as simulation, least squares, tests of significance, etc.

- **Text:** Mandatory, homework problems will be assigned from it:
  - Bulmer, *Principles of Statistics*

**Suggested references:**
- Rice, *Mathematical Statistics and Data Analysis*
- Wasserman, *All of Statistics*
- Casella & Berger, *Statistical Inference* (graduate level)
- *Schaum’s Outline of Statistics*

**Grading:**
- The grade for the course will be determined based on weekly homework assignments, a midterm, and a final exam. The following rubric will be used:
  - Homework 30%
  - Midterm 30%
  - Final 40%

  The lowest homework grade will be dropped. Homework is due at the beginning of class on the due date; in the interest of fairness, absolutely no late assignments will be accepted. Exams will not be rescheduled. The midterm is scheduled to be in-class on Thursday, March 14th. The final is scheduled by NYU, and is (tentatively) slated for May 16th at 4:00pm, room TBA.