

**Department of Statistics
The Wharton School
University of Pennsylvania**

Statistics 101

Fall 2009

Instructors: Abraham Wyner (Section 001)
Alexander Rakhlin (Sections 002 and 003)

Offices: JMHH 448 (AW), 465 (AR)

Contact: Professor Wyner: ajw@wharton.upenn.edu (215-898-2439)
Professor Rakhlin: rakhlin@wharton.upenn.edu (215-573-3637)

Your primary source for questions and answers should be the webCafe discussion board (see below). Questions on homework should be addressed to the TAs. Administrative issues and questions on the exams should be addressed to the Professors.

Classes meet: Section 001, Mon/Wed 9:00-10:20, in F95 JMHH
Section 002, Tue/Thu 12:00-1:20, in F95 JMHH
Section 003, Tue/Thu 1:30-2:50, in F95 JMHH

Office hours: Wyner: Wed: 3:00- 4:00 PM and Thursday 4:00 -5:00 PM, 448 JMHH
Rakhlin: Tue & Thu 3:30-4:30pm, 465 JMHH

Teaching Assistants and Stat Lab

Name: Adam Kapelner, Emil Pitkin
E-mail Kapelner@wharton.upenn.edu Pitkin@wharton.upenn.edu
Office: 431-4 JMHH
Office Hours: TBA

The Stat Lab provides help with statistics to anybody on campus. It is located in F96 JMHH and is open on days when classes are in session. Staffing and Schedules TBA.

Course website

Statistics 101 is using webCafe. You can gain access by going to <http://webcafe.wharton.upenn.edu> and following the link to “STAT” and then to your section. All materials for this course will be distributed and managed via this website, and you will be able to monitor your grade entries throughout the semester.

An important feature of webCafe is the **discussion board** where everybody can place questions and comments. We will be using it extensively for answering your questions about homeworks, exams and scheduling. You are urged to go here first to see whether

your question has already been asked and answered, and, if not, to place your question so it can be answered once for everybody.

Note for non-Wharton students: If you do not have a Wharton computing account, you will need to establish one to access the website. The account also provides access to the computing labs in Wharton and to the intranet. To get an account, on or after the first day of classes, go to <http://accounts.wharton.upenn.edu>. After you have obtained your account, allow up to 12 hours for activation.

Course Overview

This course develops ideas for helping to make decisions based on data. Some of the following material will be covered: data displays (including boxplots, histograms, scatterplots), summary statistics (including mean, standard deviation), uncertainty and probability as limiting relative frequency, the normal distribution as a reference standard, statistical estimation and tests, including standard errors, confidence intervals, p-values.

The course does not dwell on the details of computation—its main focus is on understanding a few deep concepts and interpreting data and statistical results.

Course Materials

- **Textbook:** *Statistics for Business*, Volumes 1 and 2 by Stine and Foster
- **Computer software:** JMP 8, available at <http://upenn.onthehub.com> (3-year license for \$59.95) Make sure to select your platform (Windows/Mac).

The software will also be used in Stat 102. If you have a Mac or any version of Windows you should have no problems. Here, too, you can save the money by just working on public Wharton computers, all of which have JMP installed.

If the textbook is not sufficient, you may consult other books, such as “The Practice of Business Statistics” by Moore, McCabe, Duckworth and Sclove, or “Statistics” by Freedman, Pisani and Purves.

Homework

- There will be about 10 homework assignments.
- Homeworks will be assigned on webCafe and will usually be due a week later. They will *not be accepted late* except for valid reasons. Back up your work frequently on a data stick, so you can submit it from a Wharton computer if yours breaks down.

- *Hand in a stapled paper copy of your solutions in the Statistics Department (JMHH, 4th floor, turn right exiting from the elevator) in the box marked with your section (not in class and not to the TAs).*
- If you are unable to submit your homework for any reason (computer broken, health problem, ...), send emergency e-mail to either TA or your instructor.
- Your solutions must have on the cover page your
 - Name
 - Section and Time
 - Professor
- Homework is designed to teach, and you are encouraged to seek help from the instructor and the TAs if you have questions. You may also work with and help each other. *You must, however, submit your own solutions, with your own write-up and in your own words. There can be no collaboration. Failure to comply will result in severe penalties.*
- Graded homework will be returned in the same boxes in the Statistics Department.
- Scores for homeworks are finalized one week after the graded copies are handed back. Thereafter there will be no changes and no re-grading. Do not delay checking your graded homeworks to the end of the semester.

Examinations

One midterm examination will be held Thu, October 29, 6:00-8:00pm.

The final examination will be Tue, Dec 15, 6:00-8:00pm.

The room assignments will be announced on webCafe closer to the exam dates.

During examinations strict rules will be in effect with regard to *honor code*.

Grading and Grading Policy

Your course grade will be calculated as 20% homework, 30% midterm examination, and 50% final examination. (What this means will be discussed during the semester.)