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

**Statistics 101**                                                   **Fall 2008**

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**Instructors:**   Ruth Heller (Section 001)
                   Andreas Buja (Sections 002 and 003)
**Offices:**       JMHH 467 (RH), 471 (AB)
**Contact:**       Send email only in case of emergency.
                   For the email address, see the instructors' web pages.
                   Your primary source for questions and answers should be the webCafe
                   discussion board (see below).  Otherwise, send email to the TAs.


**Classes meet:**  Section 001,  Mon/Wed  9:00-10:30,    in 350 SH-DH
                   Section 002,  Tue/Thu    12:00-1:30,    in F85 JMHH
                   Section 003,  Tue/Thu     1:30-3:00,    in F85 JMHH


**Office hours:**  Mon  2:00-4:00pm,  467 JMHH (RH)
                   Wed  2:30-4:30pm,  471 JMHH (AB)


**Teaching Assistants and Stat Lab**

| Name: | Igar Fuki | Pengyuan Wang | Yao Zhang | |
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| **Email:** | igarfuki… | pengyuan… | zhangyao… | (…@wharton.upenn.edu) |
| **Office:** | 434 | 431 | 434 | (JMHH) |
| **Office Hours:** | Fri 4-6pm | Mon 4-6pm | Fri 9-11am | (all sections) |

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.  For staffing and hours, see
        http://stat.wharton.upenn.edu/~braunsf/statlab.html
Whoever you find there may or may not be able to help with homework.  Most useful for
you are the Stat Lab hours staffed by our own TAs:

     Igar Fuki: Fri 2-4pm     Pengyuan Wang: Thu 1-3pm     Yao Zhang: Tue 1-3pm


**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.
Wharton students and students who have recently taken a Wharton course have existing accounts.

**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: a new book by Foster and Stine, available from Wharton Reprographics and also online on webCafe (where it is free and may be all you need).
- Computer software: JMP-IN – Statistical Discovery Software, Thomson. Download a 12-month license from
  www.e-academy.com
  The software will also be used in Stat 102. If you have a Mac or any version of Windows you should have no problems.

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 12 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.
- Homeworks should be written by editing a copy of the MS Word file that contains the problem statements. Each solution should be inserted after the respective problem statement following "YOUR SOLUTION". Handwriting is not accepted.
- Handing in your homework solutions **always in <u>both</u> of the following ways:**:
  - *hand in a stapled paper copy of your solutions in the Statistics Department in the box marked with your section (not in class and not to the TAs), **AND***
  - *e-mail your MS Word file to* stat101.at.wharton@gmail.com *with the subject line indicating the homework (HW3, e.g.).*

  For re-grades and missing claims, there needs to be an electronic copy emailed before the deadline.
- If you are unable to submit your homework for any reason (computer broken, health problem, …), send emergency email to the instructor's email address (NOT to the homework address).
- Your solutions must have on the cover page your
  - name (as it appears on webCafe),
  - section,
  - school (Wharton/non-Wharton), and
  - year (freshman, sophomore,…).
- 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. Verbatim copying is against the honor code.*
- For Wharton students, homeworks will be returned to the respective mail folders. Non-Wharton students can collect them from Room 433 in Huntsman Hall.
- Scores for homeworks are finalized one week after the graded copies are handed back. Thereafter there will be no changes and no regrading.

**Examinations**

One midterm examination will be held Thu, October 23, 6:00-8:00pm.
The final examination will be Wed, Dec 17, 3:00-5:00pm.
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.)