Department of Statistics The Wharton School University of Pennsylvania

Statistics 101

Instructors:	Andreas Buja (Sections 001 and 002) Mikhail Traskin (Section 003)		
Offices:	JMHH 471 (AB), 466 (MT)		
Contact:	Send e-mail only in case of emergency.		
	For the e-mail addresses, see the instructors' web pages.		
	Your primary source for questions and answers should be the webCafe		
	discussion board (see below). Otherwise, send e-mail to the TAs.		
Classes meet:	Section 001, Mon/	Wed 1:30-3:00,	in F85 JMHH
	Section 002, Mon/	Wed 3:00-4:30,	in F85 JMHH
	Section 003, Tue/T	'hu 1:30-3:00,	in 270 JMHH
Office hours:	Sections 001/002: M	on 12:15-1:15 and 4	4:30-5:30, 471 JMHH (AB)
	Section 003: Tue 10:	00-11:30 and Thu 1	10:30-12:00, 466 JMHH (MT)
Teaching Assistants and Stat Lab			
Name:	Asaf Weinstein	Josh Magarick	
E-mail:	asafw	magarick	(@wharton.upenn.edu)
Office:	434	432.2	(JMHH)
Office Hours	: Wed 12:30-1:30	Thu 3-4	(all sections)
	Thu 9:30-10:30	Thu 5-6	

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/~sivana/statlab.html

Currently scheduled hours are Mon, Tue, Thu 3-6pm, Wed 3-4pm. 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:

Asaf Weinstein: Tue 3-4 Josh Magarick: Thu 4-5

Course website

Statistics 101 is using webCafe. You can gain access by going to <u>http://webcafe.wharton.upenn.edu</u>

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 there 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 and summary statistics for quantitative and qualitative variables; correlation and simple regression for pairs of variables; probability as a measure of uncertainty and as limiting relative frequency; the law of large numbers; the normal distribution and the central limit theorem; statistical inference based on standard errors, confidence intervals and statistical hypothesis tests.

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: Decision Making and Analysis" by Robert A. Stine and Dean P. Foster. To keep cost down you may purchase a used copy of an earlier version. We will work around any discrepancies between versions.
- Computer software: JMP 8. Download with a 3-year license from <u>http://upenn.onthehub.com/</u>

The software will also be used in Stat 102. If you have a Mac or any version of Windows you should have no problems. (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 8-10 homework assignments.
- Homeworks will be assigned on webCafe and will usually be due a week later.
- 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.
- Back up your work frequently on a data stick, so you can print and e-mail it from a Wharton computer if yours breaks down.
- Hand 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 (JMHH, 4th floor, turn right exiting from the elevator) in the box marked with your section (not in class and not to the TAs), AND
 - E-mail your MS Word file to <u>stat101.at.wharton@gmail.com</u> with the subject line indicating the homework and the year: "Subject: HW3 2011".

For re-grades and missing claims, there must be an electronic e-mail copy with date.

- Late homeworks will incur a deduction of 2 points per day. Late homeworks must be handed to the TAs directly, not placed in the submission box. Sending to gmail is not sufficient; the gmail account is only an insurance against misplacement on our part and will be consulted when needed only.
- If you have a valid reason for late homework submission (e.g., computer broken, health problem), explain your situation to the instructor in class and he will validate your paper copy with a note to the TAs so they grade your work without point deduction.
- Your solutions must show on the cover page your
 - o name (as it appears on webCafe),
 - 0 section,
 - 0 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, in person and on webCafe.
- You must, however, submit your own solutions, with your own write-up and in your own words. Verbatim copying and working off someone else's file is a violation of the honor code. Printed homework solutions and homework files must not be exchanged!
- Graded homeworks will be returned in the same boxes in the Statistics Department.

- Homeworks are graded with variable maximal scores to reflect the variable amount of work and understanding necessary to complete them.
- 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. Missing homeworks receive a score of zero.

Examinations

There will be one midterm examination, to be held Thu, March 17, 6:00-8:00pm. The final examination will be held Tue, May 10, 6:00-8:00pm. 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*. After the midterm exam is handed back, there is a possibility of contesting the results as follows:

- Send email to <u>stat101.at.wharton@gmail.com</u> with subject line "Midterm Inquiry", giving your name if not evident from your email address, the version of the exam, the questions you are contesting, and the reasoning as concisely as possible.
- However, it is recommended that you check your reasoning with the TAs before sending your inquiry because if your reasoning reveals a misunderstanding of concepts taught in class, you will incur a deduction from your exam score.

Grading and Grading Policy

- Your course grade will be calculated as 25% homework, 30% midterm examination, and 45% final examination. (What this means will be discussed during the semester.)
- All homeworks will be included in the computation of the final grade; there is **no** "drop the lowest" policy. Missing homeworks will be counted as a zero score.

It is important to complete all homework assignments as a single missing homework can cause serious deterioration of the grade.