

## DEPARTMENT OF STATISTICS

STAT 101

Fall 2015

# Introduction to Business Statistics Sections 001 and 002 Syllabus

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Classes meet:	Section 001, Section 002,		12:00-1:30, 1:30-3:00,		
Office hours:	Tue, Wed 3:00-4:00pm				
Teaching Assistants (all office hours are in 441 JMHH)					
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**Contact:** Your primary source for questions and answers should be the Canvas 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 Professor.

#### **Course websites**

Statistics 101 is using (a) Canvas and (b) a separate wiki page.

a. You can gain access to Canvas by going to <u>https://canvas.upenn.edu</u>. 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 Canvas 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 might want to establish one. The account 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 <u>http://accounts.wharton.upenn.edu</u>.

b. In addition to Canvas, some course notes will be posted on a wiki here: <u>http://stat.wharton.upenn.edu/~rakhlin/wiki/</u>

### **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* by Stine and Foster, 2<sup>nd</sup> edition
- Computer software: JMP 12, available at <a href="http://upenn.onthehub.com">http://upenn.onthehub.com</a> (3-year license for \$59.95) Make sure to select your platform (Windows/Mac). Earlier versions of JMP will work fine.

The software will also be used in Stat 102. 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 10-11 homework assignments.

- Homeworks will be assigned on Canvas 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.
- Lowest homework grade will be dropped.
- Hand in a stapled paper copy of your solutions in the Statistics Department (JMHH, 4<sup>th</sup> floor, turn right exiting from the elevator) in the box marked with your section (not in class and not to the TAs).
- Your solutions must include on the first page your
  - o Name
  - Section and Time
- 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 Tuesday, October 20, 6:00-8:00pm The final examination will be Friday, Dec 11, 6:00-8:00pm. The room assignments will be announced on Canvas closer to the exam dates. During examinations strict rules will be in effect with regard to *honor code*. You will need a *calculator* for the exams (e.g. graphing calculator). No cell phones are allowed during the exams.

#### **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.)