

# DEPARTMENT OF STATISTICS

STAT 101 Fall 2016

# Introduction to Business Statistics Syllabus

# Instructor:

Abraham Wyner ajw@wharton.upenn.edu 448 JMHH 215-898-2439

**Office hours:** Tuesday 4:30-5:30 and Thursdays 3-4:00 PM. in JMHH 448.

**Teaching Assistant: Gemma Moran** gmoran@wharton.upenn.edu
Office hours: Wed 3-4:30 PM JMHH F96. Thursdays 4-6:00 Room TBA.

**Contact:** Your primary source for questions and answers should be the Canvas discussion board (see below). Questions on homework should be addressed to Gemma. Administrative issues and questions on the exams should be addressed to the Professor.

# **Course websites**

Statistics 101 is using (a) Canvas and (b) MyStatLab.

a. You can gain access to Canvas by going to <a href="https://canvas.upenn.edu">https://canvas.upenn.edu</a>. 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 <a href="http://accounts.wharton.upenn.edu">http://accounts.wharton.upenn.edu</a>.

b. In addition to Canvas, we will be using MyStatLab. Problems that are assigned from the textbook will be completed and turned in using MyStatLab. In addition there are

many resources available to you for additional practice. The entire textbook is online. Every dataset associated with problems are also available with this resource.

#### **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 as will MyStatLab. 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 12 homework assignments. This may change.
- Homework will be assigned on Canvas/MyStatLab and will usually be due a week later. They will *not be accepted late* except for valid reasons.
- Of the 12 assignments, 3-4 will be computer based. *The homework will be uploaded and turned in online (using canvas).*
- Homework is individual. You are encouraged to seek help from the instructor and the TAs if you have questions. You must 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.

• Scores for homework 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 homework to the end of the semester.

#### **Examinations**

- One midterm examination will be held **Tuesday**, **October 25**<sup>th</sup>, **6-8 PM**. Rooms TBA. The exam is closed book, but you will be allowed a **single** sided sheet of notes. Only students with an ACADEMIC conflict can reschedule the exam to a different time on the **same** date.
- The final examination will be <u>Wednesday</u>, <u>December 21<sup>nd</sup> from 6-8 PM</u>. If you cannot take the exam on this date, don't take the course. The exam is closed book, but you will be allowed a **double**-sided sheet of notes.
- 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

Attendance will be taken beginning with class 2. Since much of the "value" can be obtained by classroom attendance, you will be **required** to come to class. I will be very generous: no penalty will be assessed until you miss more than 4 classes. Your final grade being lowered up to one full grade at a rate of  $1/10^{th}$  of a full grade per class