

# DEPARTMENT OF STATISTICS

STAT 101

Summer 2017

# Introduction to Business Statistics Syllabus

## INSTRUCTOR

Linjun Zhang Email: linjunz@wharton.upenn.edu Office: 432.2 JMHH

**CLASSES MEET** 

05/22/17 – 06/27/2017 Mon/Tues/Wed/Thur/Fri 9am – 10:45am No class on Memorial Day, Monday, 05/30/2016.

## **OFFICE HOURS (tentative)**

Mon/Tues/Wed/Fri Thurs: evening before quiz 1pm – 2pm 1pm – 2:30pm JMHH 440 JMHH 440

Vance Hall B11

# CONTACT

- It is highly recommended and preferred that you contact the instructor *in person* after class and/or during the office hours.
- Your primary source for questions and answers should be the Canvas discussion board (see below).
- Only administrative issues and questions should be addressed to the instructor via email.

# **COURSE WEBSITES**

Statistics 101 uses Canvas. 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 homework, 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>.

#### **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. Several copies of this book are on reserve at the Lippincott Library Service Desk. You can borrow it for three hour time slots and copy or read and take notes as needed.

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.

**Computer software:** JMP 13, 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 (at Huntsman or Lippincott), all of which have JMP installed.

#### HOMEWORK

- There will be 5 regular homework assignments. Homework will be assigned on Canvas and will be due on Friday before the in-class quizzes (see below). A *stapled paper copy* of your solutions needs to be handed in.
- Late homework will be penalized 15% per day for a maximum of three days. Do not ask for extensions; just hand in the homework late scan or take pictures of your homework and email them to the instructor. After three days, no credit will be given because solutions will be posted (on Tuesday). Fraction of a day counts as a full day.
- Lowest homework grade will be dropped.
- Homework is designed to teach, and you are encouraged to seek help from the instructor 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 class.
- Missing homework receives a score of zero and will NOT be counted as the lowest score.

#### **QUIZZES / EXAMS**

- There will be 5 quizzes taking place on Friday (5/26, 6/2, 6/9, 6/16, 6/23) at the beginning of class. The lowest score will be dropped. As such, no makeups will be given.
- The final examination will be 9-10:45am Tuesday, Jun 27 in class. The room is the same as the usual classroom.
- During quizzes/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

Your course grade will be calculated as 20% homework, 40% quiz, and 40% final examination.