



DEPARTMENT OF STATISTICS

THE WHARTON SCHOOL
University of Pennsylvania

Statistics 101

Spring 2015

Introduction to Business Statistics

Sections 001 and 002

Syllabus

PEOPLE:

Instructor: Richard Waterman waterman@wharton.upenn.edu 443 JMH

Classes meet: Section 001, Mon/Wed 1:30-3:00pm.

Section 002, Mon/Wed 3:00pm-4:30pm.

Office hours: Mon 12-1pm. Wed 1-2:00pm.

Teaching Assistants: TBD

Questions about the homeworks should be addressed to the TAs. Administrative issues and exam related questions should be addressed to the Professor.

Course website: All course related materials will be distributed via the Canvas website and grades can be checked during the semester using Canvas. You can also use the discussion feature on Canvas to ask questions regarding the course material, exams and any scheduling issues.

COURSE OVERVIEW

This course introduces the foundational ideas that will allow you to make consistent and defensible decisions, when those decisions are based on either data or probability models. It serves as a prerequisite for Stat 102, but also will provide you with some of the tools required for the evolving disciplines of data science and business analytics.

We will cover graphical and descriptive statistics, the basics of probability modeling, the normal distribution, the central limit theorem, standard error, statistical estimation and confidence intervals together with hypothesis testing and p-values.

Readings from the text book will be posted on the Canvas site.

COURSE MATERIALS

TEXTBOOK: Statistics for Business, Stine & Foster, Second Edition.

SOFTWARE: JMP 11, available for purchase from <http://upenn.onthehub.com> or available on public Wharton computers. The software will be used in Stat102 as well.

HOMEWORK

There will be 6 homework assignments during the semester. They will not be accepted late except for a valid reason (for example, a health or family emergency). Upload a PDF version of your homework answers to the Canvas site. Your answers must contain a cover page with your name (as it appears on Canvas) and your section. Please include your name on a header on each page.

You may work with and help one another with the homework. You must however submit your own solutions, with your own write-up and in your own words. Verbatim copying from someone else's file is a severe violation of the honor code and will incur severe penalties.

Graded homeworks will be returned as annotated PDF files on Canvas.

Scores for homeworks will be finalized one week after they have been returned. If you have a query regarding your grade you must submit it to the TA in writing via email. You should reference the solution key and articulate why you think it is wrong and you are right or why you think you should have gained additional points. There is a one week window to query grades. It is the case, that on review by the TA, if they consider that the grading has been too lenient or simply in error, points can be deducted as well as gained.

QUIZZES

There will be four in-class quizzes. Quizzes last ten minutes and have 4 multiple choice questions. They will start at the beginning of the class period. There will be no make-ups for missed quizzes. However, if you have a valid reason for having missed a quiz, a score will be imputed using the average of your other quizzes.

EXAMS

There will be one in-class midterm exam and a final exam. They will both be multiple-choice. You can bring a one-page 8.5 x 11 crib sheet (front and back) to the exam. A basic scientific calculator will be helpful. No networked devices may be used during the exam – for example, you cannot use the calculator on your iPhone.

GRADING

The final grade will be weighted using 15% from the four quizzes, 20% from the 6 homeworks, 25% from the midterm and 40% from the final exam. All quizzes and homeworks will be included in the final grade. There is **no** “drop the lowest score” policy.

CLASSROOM EXPECTATIONS

There is no formal participation component to the final grade but questions are strongly encouraged. Phones, laptops and other electronic devices (except tablets for note-taking) are not to be used in class.