

BC2411 STATISTICS FOR ECONOMICS: Barnard College, Columbia University TR 4:10pm-5:25pm Fall 2020

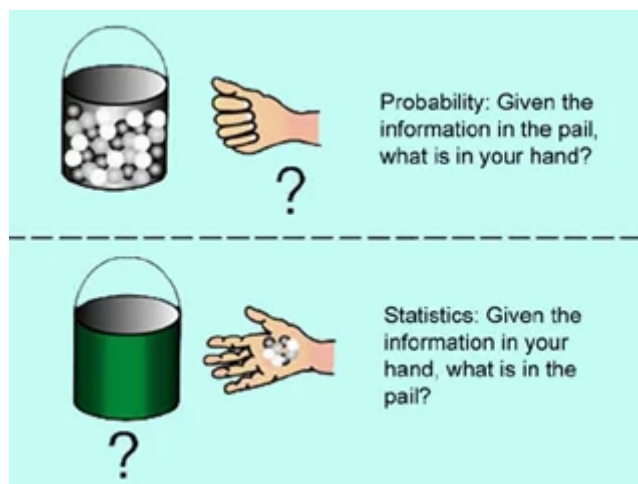
Prof. Elham Saeidinezhad
esaeidin@barnard.edu
Office Hours: TBA

Course Website:

<https://courseworks2.columbia.edu/courses/105318>

McGraw-Hill Connect Website:

<https://connect.mheducation.com/class/s-elham-fall-2020-1>



1 Course Description

This course is an introduction to statistics with economic applications. Elements of probability theory, sampling theory, statistical estimation, regression analysis, and hypothesis testing. It uses elementary econometrics and other applications of statistical tools to economic data. It also provides a solid foundation in probability and statistics for economists and other social scientists. No prior preparation in probability and statistics is required, but familiarity with basic algebra and calculus is assumed.

2 Textbook

The main sources for this course are:

- **Basic Statistics for Business & Economics, 9th Edition**, By Douglas A. Lind.

3 McGraw-Hill Connect Platform: Important

Student **must** sign up for the McGraw-Hill Connect Platform using the link below:

<https://connect.mheducation.com/class/s-elham-fall-2020-1>
to access:

- practice question,
- weekly quizzes,
- midterms
- final, and
- getting access to the book.

Lecture notes and TA questions will be provided through Barnard Course Website:

<https://courseworks2.columbia.edu/courses/105318>

4 Grade Distribution

The composition of the final grade will be roughly as follows:

- Midterm1** Exam 15%
- Midterm2** Exam 15%
- Bi-Weekly Quizzes** 10%
- TA Session Attendance** 10%
- Wikipedia Entry Project** 30%
- Final** 20%

Name	Email	Session 1 (Day/Time)	Session 2 (Day/Time)	Office Hour (Day/Time)
Alejandro Diaz Herrera	ad3705@columbia.edu	TBA	TBA	TBA

5 TA Sessions

- This course has one teaching assistant. Students must sign up for one TA session. Attendance is mandatory. Please see the table above.

6 Project: A Wikipedia Entry

Write a Wikipedia entry (or entries) for a topic in this course that has no entry, or edit one with a unsatisfactory entry: for instance **Prediction market**.

The hard deadline is **the last Monday of the Semester**. *It cannot be extended.*

7 Lectures

–We start every class by discussing a relevant news article, typically from FT, WSJ or The Economist. These articles will be posted in the course website a few days prior to Tuesday.

–The material is difficult and cumulative. To be successful in the class it is very important for you to read the relevant material before class.

7.1 Related Resources

- HyperStat Online Textbook
- Statistics Glossary
- Virtual Laboratories in Probability and Statistics
- UCLA Statistics Calculators (cdfs, pdfs, plotter, etc.)
- Dr. Math FAQ:
 - Introduction to Probability
 - Permutations and Combinations
- Ian Johnston Online Handbook:
 - Correlation
 - Normal Distribution
 - (Random) Sample and Population

8 Academic Dishonesty

–Students have an obligation to integrity in all academic work. Submission of test answers to be counted towards the course grade automatically imply a personal pledge that the student has neither given nor received unapproved information about the test, whether by copying answers, exchanging unauthorized prior information, etc. The college may initiate disciplinary proceedings against a student accused of scholastic dishonesty.

–Scholastic dishonesty may involve one or more of the following acts: cheating, plagiarism, and/or falsifying academic records.

–Cheating is the willful giving or receiving of information in an unauthorized manner during an examination, illicitly obtaining examination questions in advance, using someone else's work for assignments as if it were one's own, or any other dishonest means of attempting to fulfill the requirements of the course.

–Any cases of cheating will be reported to the Office of the Dean of Students.

9 Provisions for Possible Syllabus Revisions

This is a preliminary syllabus. There may be changes in the assignments and topics. Students are responsible for learning of any changes in the syllabus that are announced during class.

10 Tentative Course Outline

The weekly coverage might be different from this outline as it depends on the progress of the class:

Tentative Course Outline		
Important Dates	Topic	Reading
Sept. 8	What is Statistics	Chapter 1
	Describing Data:FREQUENCY TABLES, ETC	Chapter 2
	Describing Data: NUMERICAL MEASURES	Chapter 3
	Describing Data: DISPLAYING AND EXPLORING DATA	Chapter 4
	A Survey of Probability Concepts	Chapter 5
	Discrete Probability Distributions	Chapter 6
Oct. 20 Oct. 22	Midterm 1 Preparation Session Midterm 1	
Nov. 3	Election Day holiday	(no classes held)
	Continuous Probability Distributions	Chapter 7
Nov. 26	Thanksgiving holiday	(no classes held)
Dec. 1 Dec. 3	Midterm 2 Preparation Session Midterm 2	Non-cumulative
	Estimation and Confidence Intervals	Chapter 9
Dec. 11	Wikipedia Entry Project Deadline	11:59 PM EST