

BOSTON COLLEGE
DEPARTMENT OF ECONOMICS

EC1151.01, Fall 2018
Mon & Wed 3-4:15pm
Fulton 230

Matthew S. Rutledge
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Maloney 316

STATISTICS

Everywhere we look, we encounter statistics. Understanding statistics is essential for economics and business, but also for your role as a consumer of news, politics, popular culture, and... well, consumer goods. Statistics can be informative, fascinating, surprising, and world-simplifying, but they can also be used to confuse, manipulate, and exasperate. This course will review the use – and misuse – of statistics and help you develop the tools required to fulfill your obligations as both an economics major and an informed citizen of the world.

Not surprisingly, this course is math-heavy, which you may find demanding and, at times, daunting. It will be important to recognize, understand, and be able to use technical notation, but it's worth remembering that the notation is actually there to make our lives easier.

The course is also laden with statistical formulas, and I have good and less-good news about that. The good news: you will not have to memorize formulas, as those will be provided for you in the exams. The less-good news: because you are capable of so much more than just plugging numbers into a formula, exam grading will rely almost entirely on your ability to correctly deploy and, maybe more importantly, interpret statistical measures and concepts.

Therefore, this course is at least as much an analytics course as it is a math course, and exams will involve a fair amount of writing. For each problem set and exam question, you should be able to explain why the statistical technique is appropriate, the intuition behind it, and what the answer really means, in your own words, as if you are talking to someone with limited statistical knowledge. Because the world is full of people with limited statistical knowledge.

Office Hours and Optional Sections

Professor Rutledge
Fri 11am-12pm (section – Fulton 135)
Tues 8-9am (Maloney 316)
Wed 4:30-5:30pm (Maloney 316)

TA: Xiaoying Lan (lanx@bc.edu)
Wednesday 7-8pm (section – Campion 300)
Thursday 1-3pm (Maloney 340C)

Also, you can feel free to consult Prof. Cichello's TAs:

Benjamin Ferri (ferrib@bc.edu)
Tuesday 7-8pm (section – Cushing 209)
Wednesday 5:30-7pm (Maloney 340G)

Liang (Lia) Yin (yinlb@bc.edu)
Thursday 7-8pm (section – Campion 300)
Tuesday 12:30-2pm (Maloney 335D)

Additionally, the Connors Family Learning Center (in O'Neill) has tutors available for you to consult.

Textbook

Statistics for Business and Economics with MyStatLab (8th edition) by Newbold, Carlson, Thorne. We've made a custom version for ECON 1151 at Boston College that omits some

Participation

Your participation grade is determined in equal parts by:

- Class attendance (measured by iClicker responses);
- Completing graded problem sets on MyStatLab (described previously); and
- Your performance on these graded problem sets.

Exams

Exams will be closed book. I will provide a formula cheat sheet as well as any statistical tables you will need. I will post those cheat sheet/tables in advance.

Examination Make-up Policy

The following policy will be strictly enforced:

- 1) You must obtain my approval before the exam or you will be penalized.
- 2) There will be no make-up exams for either midterm. If you miss a midterm exam, the weight assigned to that exam will be distributed over the remaining exams.

Academic Integrity

Cheating on any exam will result in

- 1) An automatic failure in the course and
- 2) R

SYLLABUS

<u>Date</u>	<u>Topic</u>	<u>Chapter</u>
8/27	Introduction; Where Do Data Come From?; The Use and Misuse of Statistics	1.1-1.6
8/29	Summation notation; means and medians; outliers	2.1; 1.5; 2.3
9/5	Percentiles; variance and standard deviation; z	