

ECON 261 Principle Statistics I

Wintermester 2019

Number of Credits

3

Instructor

Dr. Shufeng Song

Catalog Description

Descriptive statistics; graphing; central tendency and dispersion measures; probability; probability distributions; decision theory, sampling, inference and estimation. Emphasis on data analysis and critical thinking.

Prerequisite(s): IS 101; MATH 126 or higher.

Required Textbooks/Materials

The following texts are required material in this course:

Business Statistics, second edition, by Jaggia and Kelly, McGraw Hill Education. ISBN: 978-0-07-802055-5

Student Learning Outcomes

Upon successfully completing this course, students will be able to

- correctly identify both qualitative and quantitative variables and organize data by developing the appropriate tabular and graphical methods typically used in business applications;
- compute and interpret the basic statistical measures of central tendency, dispersion and location when presented with study variables and understand the importance of these measures in statistical analysis;
- demonstrate understanding of the concept of randomness and the use of basic probability;
- correctly use special discrete and continuous probability distributions with an emphasis on how the distributions are used to assist decision making; and
- identify and use sampling distributions and apply them to confidence interval estimation for both quantitative and qualitative variables.

Course Details

This semester covers chapters 1-8. Topics include data, descriptive statistics, probability, probability distributions, sampling methods, sampling distributions, and interval estimation.

Lecture notes will be handed out in advance. Please bring them to class. Students are not expected to spend time taking these notes (again) during lectures.

There are two multiple-choice-question exams. The midterm exam covers chapters 1-5. The final exam covers chapters 6-8. Opportunities to earn extra credits will be given to both exams. In exams, you can use the Tables in the end of the textbook. You also can use one page notes (letter size, one-sided). No make-up test is allowed. Please purchase a few scantron forms in advance, the long ones with 50 questions on each side. Color does not matter.

Some comments on the course:

1. This is a three-week course, with each day having a three-hour lecture, very time-intensive. Class attendance is crucial and a given.
2. Bring your scientific calculator and textbook to every class. There are a lot of in-class practices. Practice is the key.
3. If you have any questions, please feel free to ask in class or during office hours.

Grade Breakdown

The point distribution for the course is:

Assignment	Percentage
Midterm Exam	45
Final Exam	45
Computer Project	5
Attendance	5
<i>Total</i>	<i>100</i>