



Shanghai University of Finance & Economics

2018 Summer Program

MAT 22 Introduction to Statistics

Course Outline

Term: June 4 – June 29, 2018

Class Hours: 6:00-8:00PM (Monday through Friday)

Course Code: MAT 22

Instructor: Islam Rizvanoghlu

Home Institution: University of Houston

Office Hours: TBA and by appointment

Email: irizvanoghlu@uh.edu

Credit: 4

Class Hours: This course will have 52 class hours, including 32 lecture hours, professor 8 office hours, 8-hour TA discussion sessions, 4-hour review sessions.

Course Description:

This course introduces basic statistical concept applied to the economics data analysis. This course emphasizes the understanding of statistics and how statistics are used in the business problems. Modern business analysis requires rigorous statistical analysis to draw meaningful business conclusions. We will use economic examples to introduce statistical techniques.

We will use Microsoft Excel to do various statistical analyses. Microsoft Excel is designed for spreadsheet program, but it also has good statistical data analysis functions. I will teach various Excel functions in class for the statistical analysis.

Textbook:



上海财经大学

Shanghai University of Finance & Economics

中国上海市国定路777号 邮编200433 777 Guoding Road, Shanghai, 200433, China

1. Essentials of Statistics for Business and Economics, 7th ed., Anderson, Sweeney, Williams, Camm and Cochran, CENGAGE Learning, 2015
2. Lecture slides will be provided in the class.

Prerequisite:

Principles of Microeconomics and Principles of Macroeconomics, or equivalents.

Attendance:

Students should attend class regularly, arrive on time and not leave early. While you are in class, show the proper respect to your instructor and to your classmates. When you must miss a class, it is your responsibility to get the class material from me or your classmates. Class attendance will be checked regularly. In the event of extended absence, students should report to instructor and/or academic dean for approval. Excessive absence may result in the course grade of "F".

Grading:

There will be one midterm exam and one final exam, 40% each. Exams test basic statistical theory and empirical applications. Homework accounts for the remaining 20% for the course grade.

Academic Honor Code:

The Code of Honor will be strictly applied. Honor Code pledges "I will not participate in or tolerate academic dishonesty." Students will not give or receive aid on exams. This includes, but is not limited to, viewing the exams of others, sharing answers with others, and using books or notes while taking the exam. You can collaborate to study your homework, but you have to submit your own completed homework to receive appropriate credit. Copying solutions from others, whether they are current or past, constitutes plagiarism.

Computer Program:

We will use Microsoft Excel to do various statistical analyses. Microsoft Excel is designed for spreadsheet program, but it also has good statistical data analysis functions. I will teach various Excel functions in class for the statistical analysis. Microsoft Office Excel and Power Points are required for the class.

Tentative Course Schedule

The course outline is tentative and I will modify accordingly depending on the pace of the class. We will cover as many topics as time permits, but I will take time to make sure every student



understand class material well.

Week 1:

Session 1: Chapter 1: Introduction: Data and Statistics

Session 2: Chapter 2: Descriptive Statistics: Tabular and Graphical Presentations

Session 3: Chapter 3: Descriptive Statistics: Numerical Measures

Session 4: Chapter 4: Introduction to Probability

Week 2:

Session 5: Chapter 5: Discrete Probability Distribution

Session 6: Chapter 6: Continuous Probability Distribution

Session 7: Chapter 6: Continuous Probability Distribution

Session 8: Midterm Exam

Week 3:

Session 9: Chapter 7: Sampling and Sampling Distributions

Session 10: Chapter 8: Interval Estimation

Session 11: Chapter 9: Hypothesis Testing

Session 12: Chapter 10: Comparisons Involving Means, Experimental Design and ANOVA

Week 4:

Session 13: Chapter 11: Comparisons Involving Proportions and Test of Independence

Session 14: Chapter 12: Simple Linear Regression

Session 15: Final Exam