Shanghai University of Finance & Economics

2020 Summer Program

ECON 203 Business Statistics

Course Outline

Term: June 1 – June 26, 2020

Class Hours: 12:00-13:50 (Monday through Friday)

Course Code: ECON 203

Instructor: Byung-Joo Lee, Visiting Professor of Economics

Home Institution: University of Notre Dame, Notre Dame, IN   46556 U.S.A.

Office Hours: TBA and by appointment

Email: bjleend@gmail.com

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.

This course consists of 4 sessions of 120 minutes each per week for 4 weeks. This course is very intensive and covers course content equivalent to one regular semester three credit course in U.S. university.

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:

1. Essentials of Statistics for Business and Economics, 8th ed., Anderson, Sweeney, Williams, Camm and Cochran, CENGAGE Learning, 2018
2. Lecture slides will be provided in the class.

Prerequisite:

1. 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. You will earn maximum 15 points for attendance for the final grade. Late arrival and excused absence will cost 0.5 point. Excessive absence may result in the course grade of "F".

Grading:

There will be one midterm exam and one final exam, 40 points each. Exams test basic statistical theory and empirical applications. Homework accounts 20 points. There is 15 extra points for attendance.

A: 86-100%   B: 71-85%   C: 51-70%   D: 41-50%   F: Below 40%

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.

Week 1: Descriptive Statistics

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: TA Review Session

Week 2: Probability Distributions

Session 5: Chapter 4: Introduction to Probability

Session 6: Chapter 5: Discrete Probability Distribution

Session 7: Chapter 6: Continuous Probability Distribution

Session 8: Midterm Exam

Week 3: Sampling Distribution

Session 9: Chapter 7: Sampling Distribution

Session 10: Chapter 8: Interval Estimation

Session 11: Chapter 9: Hypothesis Testing

Session 12: TA Review Session

Week 4: Statistical Inferences

Session 13: Chapters 10/11: Inference About Means and Proportions, & Variances

Session 14: Chapter 11/14: Simple Linear Regression

Session 15: Final Exam