Statistics 2

Course Information

Instructor: Chen, Hui-Chieh 陳慧倢

Class Time: Thursday 13:00-16:00
TA Session: Tuesdays 13:00~14:00
Instructor Consultation: By appointment - jennyccu@ccu.edu.tw

Course Objective

This course introduces fundamental statistical concepts and their applications in finance. In addition to standard textbook material, students will complete a finance-oriented statistical project that involves collecting data from TEJ, developing research hypotheses, designing statistical models, conducting empirical tests, and interpreting results. Overall, students are expected to learn how to use statistical methods to address research questions and draw evidence-based conclusions in financial contexts.

Textbook

McClave J. T., P. G. Benson, & T. Sincich. (14th ed.). Statistics for Business and Economics. Pearson.

Grading Policy

Midterm Exam: 40%
Statistical Project for Finance: 60%

About the Statistical Project or Finance:
The final project will be completed by 2 students as a group (group size may be adjusted depending on enrollment). Groups will be formed before 3/26. Using TEJ data, each team will produce a final report that includes: (1) hypothesis development, (2) statistical modeling, (3) statistical testing, and (4) interpretation of results.

Schedule

Week 1: 2/26	Course Overview
Week 2: 3/5	Chapter 10: Categorical Data Analysis
Week 3: 3/12	Chapter 11: Simple Linear Regression
Week 4: 3/19	Chapter 12: Multiple Regression and Model Building
Week 5: 3/26	Project briefing & team formation; project guidance and advising (TEJ data access/download, and developing hypotheses based on available data)

Week 6: 4/2	Chapter 14: Time Series: Descriptive Analyses, Models, and Forecasting
Week 7: 4/9	**Written submission due: (1) hypothesis development, and (2) statistical modeling**
Week 8: 4/16	Feedback on submissions; Pre-Exam Review
Week 9: 4/23	**Mid-term Exam**
Week 10: 4/30	Project guidance and advising, Chapter 15: Nonparametric Statistics
Week 11: 5/7	Project guidance and advising, Chapter 13: Methods for Quality Improvement: Statistical Process Control
Week 12: 5/14	**Statistical final report submission due, including (3) statistical testing and (4) interpretation of results. Students may submit the written report (Word file), dataset, and code files/tool used first. Presentation slides can be completed shortly before your presentation.**
Week 13: 5/21	**Student presentations**; instructor feedback and evaluation
Week 14: 5/28	**Student presentations**; instructor feedback and evaluation
Week 15: 6/4	**Student presentations**; instructor feedback and evaluation
Week 16: 6/11	*Flexible Week*
Week 17: 6/18	*Flexible Week*
Week 18: 6/25	*Flexible Week*