National Taiwan University of Science and Technology

2020 Summer Program

ECON 203 Business Statistics

Course Outline

Term: July 06-August 07,2020

Class Hours: 14:00-15:50 (Monday through Friday)

Course Code: ECON 203

Instructor: Sean Brocklebank

Home Institution: University of Edinburgh

Email: sean.brocklebank@ed.ac.uk

Office Hours: By Appointment

Credits: 4

Class Hours:
According to the regulations of Minister of Education, R.O.C, 18 class hours could be counted as 1 academic credit in all universities in Taiwan. This course will have 72 class hours, including 40 lecture hours, professor 10 office hours, 10-hour TA discussion sessions, 2-hour review sessions, 10-hour extra classes.

Course Description:
This course introduces basic statistical concepts with a focus on economic applications. The learning emphasis is on conveying statistical intuition with numerical examples. Students should emerge with an understanding of how statistics can be used to solve actual problems, and how to be a good consumer of statistics both in business and in wider life. Every opportunity will be taken to tie the course concepts into real world applications.

Required Textbook:
OpenIntro Statistics 4th Edition by David Diez, Mine Cetinkaya-Rundel, and Christopher Barr. (*Note*: This is an open-source book which can be downloaded for free from openintro.org)

Other article-length readings will be distributed by email closer to the start of the course.

Grading & Evaluation:

Midterm Exam	30%
Final Exam	40%
Homework	15%
Group Project	15%

Notes: Both the Midterm and Final exams will have an MCQ section and a written section, where the written section provides some choice over which questions to answer. A mock exam will be provided.

The group project will involve preparing a short presentation in groups of 2 – 4 students using official statistics which are relevant to Taiwan. Students can use whatever software they prefer. Further details will be available closer to the start of the course.

Plus/Minus Grade Cutoffs

A+	97% to 100%	B+	87% to 89%	C+	77% to 79%	D+	67% to 69%	F under 60%
A	93% to 96%	B	83% to 86%	C	73% to 76%	D	63% to 66%	
A-	90% to 92%	B-	80% to 82%	C-	70% to 72%	D-	60% to 62%	

Course Schedule (tentative, but any changes will be notified in advance)**:**

Week 1

Session 1: Chapter 1: Introduction to Data

Session 2: Chapter 2: Summarizing Data

Session 3: Chapter 3: Probability

Session 4: TA Review Session

Week 2

Session 5: Student Group Data Presentations (Based on Chapters 1 & 2)

Session 6: Chapter 3: Probability

Session 7: Chapter 4: Distributions of Random Variables

Session 8: TA Review Session

Week 3

Session 9: Chapter 5: Foundations for Inference

Session 10: Chapter 6: Inference for Categorical Data

Session 11: Chapter 7: Inference for Numerical Data

Session 12: TA Review Session

Week 4

Session 13: Midterm Exam

Session 14: Chapter 8: Introduction to Linear Regression

Session 15: Chapter 9: Multiple and Logistic Regression

Session 16: TA Review Session

Week 5

Session 17: Chapter 9: Multiple and Logistic Regression

Session 18: Semester Review Session

Session 19: Final Exam