

Department of Transportation & Communication Management Science

H533501

Regression Analysis (迴歸分析)

Fall 2020

1. This mission of the College is to serve business and society in the global economy through developing quality and socially responsible professionals and business leaders.
2. The strategic objective of the Department of Transportation and Communication Management Science is to incubate innovative professionals with global mind in ubiquitous services.

General Program Learning Goals (goals covered by this course are indicated):

	1	Graduates should be able to communicate effectively verbally and in writing.
V	2	Graduates should solve strategic problems with a creative and innovative approach.
	3	Graduates should demonstrate leadership skills demanded of a person in authority.
	4	Graduates should possess a global economic and management perspective.
V	5	Graduates should possess the necessary skills and values demanded of a true professional.

Instructor:

Dr. Pei-Chun Lin, Ph.D (林珮琄)

Email: peichunl@mail.ncku.edu.tw

Office hour: Monday 13:00~15:00 or by appointment. In advance of our meeting, please send me a short paragraph on what you are working on and what you would like to achieve in our meeting. The more precise the better, as this will make the meeting more productive and efficient.

Course Description:

Regression analysis is a statistical methodology that utilizes the relation between two or more quantitative variables so that a response or outcome variable can be predicted from the other, or others. This methodology is widely used in business, the social and behavioral sciences.

Course Objectives:

The objective of regression analysis is to provide students tools necessary for using the modeling approach for the intelligent statistical analysis of a response variable correctly.

Content Summary:

1. Linear Regression with One Predictor Variable
2. Inferences in Regression and Correlation Analysis
3. Diagnostics and Remedial Measures
4. Simultaneous Inferences and Other Topics in Regression Analysis

5. Matrix Approach to Simple Linear Regression Analysis
6. Multiple Regression – I
7. Multiple Regression – II
8. Models for Quantitative and Qualitative Predictors
9. Logistics Regression

Recommended references:

Applied Linear Regression Models by M. H. Kutner, C. J. Nachtsheim, J. Neter. and Li McGraw Hill, 2019, 5th edition.

Course Requirement:

Student evaluation will be done on the basis of exams. Student attendance and participation in all lectures and sections is expected and required.

Grading Policy:

- Class Participation: 10%
- Homework & Quiz: 30%
- Term Projects: 60%

Marking Policy in the AACSB sense:

		Homework & Quiz 40%	Class Participation 10%	Term Projects 50%
COMMU	<input type="checkbox"/> Oral Communication/ Presentation			
	<input type="checkbox"/> Written Communication			
CPSI	<input type="checkbox"/> Creativity and Innovation			
	<input type="checkbox"/> Problem Solving			
	<input checked="" type="checkbox"/> Analytical and Computational Skills	100%		30%
LEAD	<input type="checkbox"/> Leadership & Ethic			
	<input type="checkbox"/> Social responsibility			
GLOB	<input type="checkbox"/> Global Awareness			
VSP	<input checked="" type="checkbox"/> Values, Skills & Profession		100%	
	<input checked="" type="checkbox"/> Information Technology			30%
	<input checked="" type="checkbox"/> Technical Skills			40%
	<input type="checkbox"/> Management Skills			