







Applied Linear Models Week 1

C. Andy Tsao

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Outline

-  Course Info
-  Where do you stand?
-  Learning APLM
-  Projects and Evaluation
-  Why Stat?
-  Regression: SLR and GLM
-  Review of Simple Linear Regression
Reading and Practice

Course Info



Instructor: C. Andy Tsao
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[Course Web](#)



Office Hours: Wed. 0910-1000; Thr. 1310-1500 @ SE
A411 or by appointment.

-
- Why am I taking this course?
 - What am I going to learn?
 - What does it take to prevail or to succeed in this course?
 - What are the connection among this course and other course?
 - Am I well-equipped for this course?
 - How does this course fit to my career
-

Learning APLM

■ Project: Problem-Solving



Study Unit: Team with

Evaluation

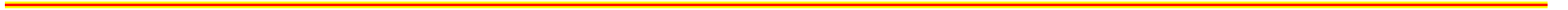
 Homework

 Team



Overview

- 📍 Life in e-world: SWOT
 - 📍 Numericalized/Digital world: Determinism and Stochasticism
 - 📍 Decisions and choices: what are they based upon?
- 📍 Examples
 - 📍 How many studying hours does it take for a math student to survive?
 - How much money do a NDHU student spend each month? Will that make a StarBucks pro table?
 - 📍 Is NDHU a better university than Dong-Dong University?









Murray at work








A not-so-len

Conceptual framework

-  Intuition vs. Educated Intuition and Educated Guess
-  Whole might be easier to be understood than part.
-  Raw data is not helpful; organized or summarized data is.
-  Systematic way of organizing, analyzing, understanding what happened and predicting the future.
 -  Estimation/Evaluation from partial sample to whole population.
 -  Prediction from the observation from the past.

Example: SKII, 7-11 Yu-Fan Tuan, Surveys.

SLR and GLM

-  Why is it so popular?
-  What are the applications?
-  Does linear regression apply to non-linear relation?
-  Estimation and Prediction
-  Use, Misuse and Abuse

