

# Statistics (I), Class 02

## Fall, 2011

**Instructor:** Hui-Ching Chuang

**Hour:** Thursday, AM 09: 00-- PM12:00

**Classroom:** Room 206, Bldg. 2, College of Management, NTU

**Office Hour:** By Email Appointment

**E-Mail:** [hcchuang@ntu.edu.tw](mailto:hcchuang@ntu.edu.tw)

**TA/TA EMAIL:** TBA

**Review Section:** Friday, PM12:00, Computer Center, College of Management

### Course Description:

This is an introductory course of statistical methods. I will introduce basic probability theory, point estimation methods, as well as hypothesis testing. Upon successful completion of this course, you will be able to summarize numerical data by descriptive statistics, making inferential statements based on basic probability theory. Ultimately, knowing something about:

*Probability is the very guide of life.*

- Cicero (Marcus Tullius Cicero) (often called "Tully" for short), *De Natura Deorum* (5, 12)

### Required Textbook:

C.-M. Kuan, *Statistics: Concepts and Methods*, 2nd edition (in Chinese, 495 pages), Taipei: Hua-Tai Publisher, 2004.

Textbook web site: <http://homepage.ntu.edu.tw/~ckuan/books.html>

### Suggested Readings:

- David Salsburg, *The Lady Tasting Tea: How Statistics Revolutionized Science in the Twentieth Century*.
- Nassim Nicholas Taleb, *The Black Swan: The Impact of the Highly Improbable*.

## Grading:

Midterms: 50% (Thursday, 2011/10/20, 2011/12/08)

Final Exam: 30% (Thursday, 2012/01/05)

Review Section: 20% (Every week, Friday)

## Tentative Schedule

Week	Date	Content
1	9/15	Descriptive Statistics
2	9/22	Descriptive Statistics
3	9/29	Basic Probability Theory
4	10/6	Basic Probability Theory
5	10/13	Uni-variate Random Variables
<b>6</b>	<b>10/20</b>	<b>First Midterm</b>
7	10/27	Uni-variate Random Variables
8	11/3	Multi-variate Random Variables
9	11/10	Special Distributions
10	11/17	Special Distributions
11	11/24	Point Estimator
12	12/1	Point Estimator
<b>13</b>	<b>12/8</b>	<b>Second Midterm</b>
14	12/15	Hypothesis Testing
15	12/22	Hypothesis Testing
16	12/29	Hypothesis Testing
<b>17</b>	<b>1/05</b>	<b>Final Exam</b>