

# Statistics I

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# Welcome!

- ▶ This is the **introductory business** Statistics course designed for students majoring in **Information Management**.
  - ▶ Introductory: No knowledge regarding Statistics is assumed.
  - ▶ Business: **Applicative** rather than theoretical. Most applications are for business. Some are for engineering and computer science.
  - ▶ Information Management: Focus more on **computer techniques** and **mathematical derivations** than those for other business majors.

# Before you enroll ...

- ▶ Prerequisites:
  - ▶ Some Calculus.
  - ▶ A little bit of Linear Algebra.
- ▶ Language: **“All” English.**
  - ▶ All materials are in English.
  - ▶ Students are welcome to speak Chinese in class.
  - ▶ TA speak Chinese in labs.
  - ▶ I speak Chinese in my office hour unless you prefer English.
  - ▶ I will speak Chinese in lectures **when needed.**
  - ▶ The **second semester** of this course (Statistics II) will **NOT** be offered with lectures in English!

# The instructor

- ▶ Ling-Chieh Kung.
- ▶ B90 and R94.
- ▶ First-year assistant professor.
- ▶ Office: Room 413, Management Building II.
- ▶ **Office hour:** 12-2pm, Tuesday or by appointment.
- ▶ E-mail: lckung@ntu.edu.tw.

## Related information

- ▶ Classroom: Room 104, Management Building I
- ▶ Meeting time:
  - ▶ Lectures: 2:20-5:20pm, Wednesday.
  - ▶ Labs: 1:20-2:00pm, Wednesday.
- ▶ Textbook: “Applied Business Statistics: Making Better Business Decisions” by Ken Black, 7th edition.
- ▶ References:
  - ▶ “Mathematical Statistics with Applications” by D. Wackerly, W. Mendenhall III, and R. Scheaffer.
  - ▶ “Probability and Statistics” by M. DeGroot and M. Schervish.

## On-line resources

- ▶ **CEIBA**.
- ▶ <http://www.ntu.edu.tw/~lckung/courses/StatFa12/>
- ▶ The bulletin board “NTUIM-lckung” on **PTT**.

# Grading

- ▶ Homework: 15%.
- ▶ Projects: 20% (each project counts for 10%).
- ▶ Class participation: 5%.
- ▶ 2 Exams: 60%:
  - ▶ Plan 1: midterm 25% and final 35%.
  - ▶ Plan 2: midterm 20% and final 40%.
- ▶ The final letter grades will be given according to the following conversion rule:

Letter	Range	Letter	Range	Letter	Range
A+	[90, 100]	B+	[77, 80)	C+	[67, 70)
A	[85, 90)	B	[73, 77)	C	[63, 67)
A-	[80, 85)	B-	[70, 73)	C-	[60, 63)

# Policies: Class participation and labs

- ▶ Class participation:
  - ▶ Attendance does not count.
  - ▶ Speaking to me during lectures or office hour counts.
  - ▶ Speaking to TAs during labs does not count.
  - ▶ Posting on the course bulletin on PTT counts.
- ▶ Labs:
  - ▶ 1:20-2:00pm every Wednesday.
  - ▶ The large computer classroom at Management Building I.
  - ▶ Solving homework problems.
  - ▶ Teaching **computer techniques**.
- ▶ **Office hour**: Just come!



# Policies: Homework

- ▶ Homework:
  - ▶ Weekly homework (unless there is a holiday or exam).
  - ▶ **Due 1:00pm on Wednesday.**
  - ▶ Please put a **hard copy** into **my mail box** on the first floor of the Management Building II.
  - ▶ No late submission.
  - ▶ The lowest two homework grades are dropped.
  - ▶ The TAs grade homework and regrade them upon request.

## Policies: Projects and exams

### ► Projects:

Project	Number of team members	Presentation	Report Report due
1	1 to 3	No	After the midterm
2	5 to 8	15 minutes	Before the final

### ► Exams:

- In-class and open-book.
- Except a calculator, no electronic device is allowed.
- Cheating will result in severe penalty.

# Policies: Materials

- ▶ All materials used in a lecture will be posted on-line before the lecture begins.
- ▶ They may be slightly modified after the lecture.
- ▶ The final version will then be posted.

## Before we start ...

- ▶ If you are an IM student:
  - ▶ Most likely I won't teach this course in the next year. XD
- ▶ If you are not:
  - ▶ Think twice!
  - ▶ Ask for the codes for enrollment after this entire lecture.

# Is Statistics important?

- ▶ Is **Engineering Mathematics** important?
  - ▶ Linear algebra, probability, differential equations.
  - ▶ As **all engineering students** are required to take Engineering Mathematics, we tend to believe that it is important for engineering students.
- ▶ Is **Accounting** important?
  - ▶ As **all business students** are required to take Accounting, we tend to believe that it is important for business students.

# Is Statistics important?

- ▶ Is Statistics important?
  - ▶ Who are also required to take Statistics?
  - ▶ All business departments.
  - ▶ Political Science, Economics, Sociology, Social Works.
  - ▶ Library and Information Science, Education.
  - ▶ Medicine, Dentistry, Pharmacy, Nursing, Medical Technology, Public Health.
  - ▶ Geography, Psychology, Atmospheric Science.
  - ▶ Civil Engineering, Electrical Engineering, Industrial Engineering.
  - ▶ Agronomy, Agricultural Economics, Plant Pathology, Animal Science, Forestry, Horticulture, Bioenvironmental Systems Engineering, Veterinary Medicine, Agricultural Extension.

# Why Statistics?

- ▶ So Statistics is probably very important. But why?
- ▶ Learn it and you will know!