

## Course Syllabus

- 1. Program of Study** Bachelor of Science Program  
Bachelor of Arts Program  
Bachelor of Business Administration Program  
Bachelor of Nursing Science Program
- Faculty/Institute/College** Mahidol University International College
- 2. Course Code** ICNS 104  
**Course Title** Fundamental Statistics
- 3. Number of Credits** 4(4-0-8)(Lecture/Lab/Self study)
- 4. Prerequisite (s)** ICNS 103
- 5. Type of Course** General Education Course
- 6. Session** 3<sup>rd</sup> trimester
- 7. Conditions** -

**8. Course Description**

Descriptive statistics, modern statistical methods as a basis for decision making in the face of uncertainty; probability theory; discrete and continuous distributions, sampling, hypothesis testing, estimation, simple linear regression analysis.

**9. Objective (s)**

After successful completion of this course, students should be able to  
Same as course description

**10. Course Outline**

Week	Topic	Hour			Instructor
		Lecture	Lab	Self-Study	
1	Introduction, Presenting Data in Tables and Charts	4	0	8	Pariya
2	Describing Data Using Numerical Measures	4	0	8	Pariya
3	Basic Probability Concepts	4	0	8	Pariya
4	Discrete Random Variables and Probability Distributions	4	0	8	Pariya
5	Continuous Random Variables and Probability Distributions	4	0	8	Pariya
6	Review for midterm examination and midterm examination	4	0	8	Pariya
7	The Sampling Method and Sampling Distribution	4	0	8	Pariya

8	Estimating Population Values (Point and Confidence Interval Estimates)	4	0	8	Pariya
9	Fundamental of Hypothesis Testing	4	0	8	Pariya
10	Introduction to Decision Analysis	4	0	8	Pariya
11	Introduction to Quality and Statistical Process Control	4	0	8	Pariya
12	Total	444	0	88	Pariya
Final Examination					

### 11. Teaching Method (s)

- 11.1 Lecture
- 11.2 Practical exercises
- 11.3 Self-study
- 11.4 Group presentation

### 12. Teaching Media

- 12.1 Texts and teaching materials
- 12.2 Computer, LCD
- 12.3 Computer software such as Microsoft Office

### 13. Measurement and evaluation of student achievement

Student achievement is measured and evaluated by

13.1 the ability to know descriptive statistics, modern statistical methods as a basis for decision making in the face of uncertainty; probability theory; discrete and continuous distributions, sampling, hypothesis testing, estimation, simple linear regression analysis.

Student's achievement will be graded according to the faculty and university standard using the symbols: A, B+, B, C+, C, D+, D, and F.

Students must have attended at least 80% of the total class hours of this course.

Ratio of mark

- |                        |     |
|------------------------|-----|
| 1. Midterm examination | 40% |
| 2. Final examination   | 40% |
| 3. Attendance/Uniform  | 10% |
| 4. Cases               | 10% |

Score	Grade
85 up	A
80-84.9	B+
75-79.9	B
70-74.9	C+
65-69.9	C
60-64.9	D+
55-59.9	D
0-54.9	F

**14. Course evaluation**

- 14.1 Students' achievement as indicated in number 13 above.
- 14.2 Students' satisfaction toward teaching and learning of the course using questionnaires.

**15. Reference (s)**

Groebner, Shannon, Fry and Smith. Business Statistics: A Decision-Making Approach (6<sup>th</sup> edition). Prentice Hall, ISBN: 0-13-047785-0

**16. Instructor (s)**

- 16.1 Pariya Tantakasem

**17. Courses Coordinator**

Pariya Tantakasem