

Course Syllabus

1. **Program of Study** Bachelor of Science Program in Environment
Faculty/Institute/College Mahidol University International College,
Faculty of Science,
Faculty of Environment and Resource Studies (FERS),
Mahidol University
2. **Course Code** ICEN 301 **Course Title** Basic Environmental Statistics
3. **Number of Credits** 4 (**Lecture/Lab**) (4-0)
4. **Prerequisite (s)** None
5. **Type of Course** Required
6. **Trimester / Academic Year**
First / 2004
7. **Course Description**
Basic probability and statistics, elementary sampling and monitoring, statistical inferences for means and proportions, detecting and estimating trends, regression and non-parametric statistics, all relate to environmental application.
8. **Course Objective (s)**
To learn about principle of statistics and the application for further research in environmental studies.
9. **Course Outline**

Week	Topic		Instructor
	Lecture	Hour	
1	Introduction to Statistics and Environmental Application Probability	4	To be announced
2	Discrete Random Variables and Probability Distributions	4	
3	Continuous Random Variables and Probability Distributions	4	
4	Random Samples	4	
5	Statistical Inferences for means and proportions : Estimation	4	
6	Statistical Inferences for means and proportions : Hypothesis Testing	4	
7	Time Series Analysis	4	
8	Regression Analysis : Simple Linear Regression	4	
9	Regression Analysis : Multiple Linear Regression	4	
10	Non-Parametric Statistics : One Sample tests	4	
11	Non-Parametric Statistics : Two or more sample tests	4	
	Total	44	

10. Teaching Method (s)

1. Lecture
2. Practical Exercises
3. Quiz

11. Teaching Media

1. Texts and Teaching Materials
2. Transparencies
3. Power Point Presentation

12. Measurement and evaluation of student achievement

Assessment made from the set-forward criteria. Student who gets 85% up, will have Grade A.

13. Course evaluation

1. Exercises 20%
2. midterm Examination 40%
3. Final Examination 40%

14. Reference (s)

Jay L. Devore. Probability and Statistics for Engineering and the Science.

15. Instructor (s)

Dr.Vimut Prasertpunt
Asst.Prof. Dr. Kobkaew Manomaipiboon

16. Course Coordinator

Asst.Prof. Dr. Kobkaew Manomaipiboon