

National Chiayi University Syllabus
Department of Forest Products and Furniture Engineering
Fall Semester, Academic Year 2010

Course: Industrial Statistics	Credit: 3 Hours: 3
Class: Sophomore	<input type="checkbox"/> Required
Instructor: Yiren Wang	E-mail: woody
Office: A02-224	Office Hours:

I. Course Description:

An introductory course in the theory and methods of statistics. Descriptive measures, basic probability distributions, samplings, estimation, confidence intervals, hypothesis testing, correlation and regression, and basic analysis of variance.

II. Teaching Objectives:

The objective of this course is to develop basic understanding of the theory and methods of statistics which will be applied in analysis and conclusion of tested and observatory data collected.

III. Class Schedule (Wednesday, periods 1&2, Friday period 2)

Week	Date	Topic/Activity	Reading/Assignment
1		Introduction	
2		Descriptive statistics and inference statistics, figures and tables, mean, median, mode, data variation	
3		Basic probability distribution, Normal distribution	
4		Standard normal distribution, applications	
5		Correlation and simple linear regression	
6		Correlation and simple linear regression	
7		Population and sample, probability, common or rare	
8		Central limit theorem	
		Hypothesis testing (1-sample)	
9		Midterm	
10		Single tail and two-tail hypothesis testing, Significant level	
11		Test error, sample size	
12		Confidence interval	
13		Variance unknown, t-distribution, 1-sample t-test,	
14		2-sample t-test	

15	Pair t-test Definition of p
16	3-sample, Analysis of Variance
17	Analysis of Variance
18	Final

IV. Evaluation : Quizzes:30%, Midterm:35%, Final:35%

V. References :

- 1.蔡碧鳳等譯，2002，基礎統計學，桂冠圖書股份有限公司。
- 2.楊惠齡和林明德，2001，生物統計學，新文京開發出版有限公司。
- 3.王文中，2001，統計學與 Excel 資料分析之實習應用(第四版)，博碩文化。
- 4.楊志良，2002，生物統計學新論，藝軒圖書出版社
- 5.沈明來，2001，生物統計學入門，九州圖書文物公司
- 6.詹世煌、方世榮，1988，統計學導論，曉園出版社

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