

Statistics for Industry

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Course name : Statistics for Industry	Unit : 2 hrs/week : 2
Year: Junior	Course: Optional
Classroom:	Office Hours:
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A、Course Description :

Statistics for Industry provides fundamental knowledge and techniques for students who are interested in statistics. The contents cover basic logics, possibility, analysis of data distribution, regression, interval estimation and hypothesis testing with Z, T, Chi square, and ANOVA tests. The level of this course meets for the students who have learned high-school mathematics only.

At first, basic logics, possibility and analysis of data distribution will be introduced and focused on development of student's reasonable deduction and induction, and accurate calculating and analyzing data ability. After learning Z, T, Chi square, and ANOVA tests, the interval estimation and hypothesis testing will be discussed in details.

B、Teaching Goals :

The objectives of this course are to intrigue student's interests , help student appreciate the underlying logic, help student arrive at answer to any practical problem, and raise ceaseless thought about the potential of statistics used in wood industry.

It is hoped that this course will enrich the statistical concepts for those who will not study statistics further and offer robust and solid foundation for those who study statistics more intensively and professionally.

C、Class Schedule for the Fall semester in 2010

Schedule	Topic
Week 1	Basic logics.
Week 2	Descriptive statistics for data.

Week 3	Descriptive statistics for data.
Week 4	Probability distribution.
Week 5	Probability distribution.
Week 6	Z test.
Week 7	Z test.
Week 8	T test.
Week 9	Midterm examination
Week 10	Chi square.
Week 11	Interval estimation.
Week 12	Interval estimation.
Week 13	Hypothesis testing.
Week 14	Hypothesis testing.
Week 15	Regression.
Week 16	ANOVA
Week 17	ANOVA
Week 18	Final examination

D、Grade：

1. Presence, homework or reports 30%
2. Midterm test 30%
3. Final test 40%

E、References：

1. Yang, Hui-Ling and Min-Dir Lin (1999), Statistics for biology, Wen-gen library Co..
2. Yang, Zhi-Liang (1996), Introductory bio-statistics, Giant-Current library Co..
3. Thomas H. Wonnacott and Ronald J. Wonnacott (1977), Introductory Statistics for Business and Economics, John Wiley & Sons, Inc.