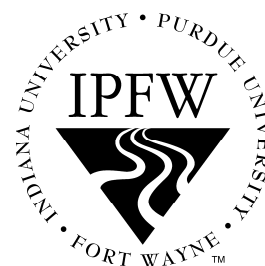


**ECON E270**  
**Statistical Theory in**  
**Economics and Business**  
**Course Syllabus**  
**Fall 2004**



**INSTRUCTOR:** Dr. Ali Rassuli      **OFFICE:** KT 267      **OFFICE PHONE:** (260) 481-5771

**COURSE PREREQUISITES:** Calculus (MA 229 or equivalent), sophomore standing  
(NOTE: Under the policies of the School, prerequisites will be strictly enforced.)

**TEXTS:** Statistical Techniques in Business & Economics, Twelfth Edition Lind, Marchal, and Wathen, McGraw-Hill Irwin Companies (2005).

**COURSE OBJECTIVES:** Students are to (1) become limited producers of statistical indicators from sets of data, (2) develop an understanding of the ways that statistical indicators are interpreted and used in business decision making, (3) become familiar with the essential elements of computer use needed to perform some statistical computing, and (4) learn to effectively communicate results of statistical analyses.

## TOPICAL OUTLINE:

What is Statistics? An Introduction	Chapter 1
Describing and Presenting Data	Chapter 2
Measures of Central Tendency	Chapter 3 (omit Geometric Mean)
Measures of Dispersion	Chapter 3 (omit pp 81-85)
Displaying Data	Chapter 4 (Selected Topics)
Probability Concepts and Rules	Chapter 5

Discrete Probability Distributions	Chapter 6 (omit pp 195-203)
The Normal Probability Distribution	Chapter 7 (omit pp 231-235)
Sampling Methods and Sampling Distributions	Chapter 8
Estimation and Confidence Interval	Chapter 9
One - Sample Hypothesis Testing	Chapter 10 (omit pp 344-347)
Two - Sample Hypothesis Testing	Chapter 11 (omit pp 371-377)
Correlation and Simple Regression	Chapter 13 (omit pp 449-454)
Multiple Regression Analysis	Chapter 14

## Examinations and Grading Procedures

Your course grade will depend upon three examinations and your class assignments/group participation as follows:

Two exams, each .	25%
Final Exam (semi-comprehensive)	35%
Group activities and assignments	15%

Final grades will be determined according to the standard university scale (i.e., 90-100% = A, 80-89% = B, 70-79% = C, and so forth).

Make-up exams will be arranged only under extraordinary circumstances. Make-up exams are given at my discretion only.

Exam questions are designed to test your **understanding** of the statistical concepts and principles presented in class. Success in this class will be **primarily** a function of understanding, **not memorization!** The exams will require more than recall—they will also require application and analysis.

## Additional Information

1. The topical outline presented in this syllabus is my estimate of how the course will proceed. Should we proceed other than estimated, course content and exam coverage will be appropriately adjusted.
2. If you have or acquire a disability and would like to find out what special services and accommodations may be available to you, contact Services for Students with Disabilities in Walb Union Rooms 118 and 125 (260-481-6657, voice/TTY).
3. Textbook reading assignments are a good source of preparation for class lectures, discussions, and activities. Good notes are in part a product of proper preparation. Since no textbook is without errors, read the text carefully. Feel free to ask me about anything in the text, which seems confusing and/or erroneous.
4. Feel free to ask questions about the material presented in class and/or the textbook.
5. Attendance in all classes is mandatory. You will loose points for absenteeism.
6. Use of the computer is an integral part of this course. Many of the class assignments will require a computer solution. Students are expected to know and be able to use Excel programs.
7. Analysis, communications, and interpretation of assignments and computer outputs will be used as the main instrument for group learning activity and group assignments.
8. The dates and coverage of each examination will be announced at least one week in advance.
9. Office hours: 2:30 p.m. to 4:00 p.m. on Wednesdays; other times by appointment.
10. Email address: [rassuli@ipfw.edu](mailto:rassuli@ipfw.edu)