

IDS 371: Business Statistics II

Spring 2008, Call 27233, Thursday 6:00-8:30 PM, Room LC C003

Yair M. Babad, UH 2403, Cell 310-431-6729, Fax 312-413-0385

e-mail: ybabad@uic.edu, URL: <http://www.uic.edu/~ybabad>

Office Hours Thursday 5:00-6:00 PM

Updated: 1/14/2008 6:27:36

COURSE DESCRIPTION

Continuation of statistical concepts and techniques for operational and managerial decisions, covering concepts and techniques for business application of statistics including inference and hypothesis testing, linear and multivariate regression and time series techniques, model building, quality improvement, and Analysis of Variance. Microsoft EXCEL spreadsheet and Minitab statistical software will be used to describe and analyze sample data.

TEXTBOOK AND COMMUNICATIONS

Textbook(s): **The Practice of Business Statistics Using Data for Decisions**, by Moore, McCabe, Duckworth and Sclove, Freeman and Company, 2003, ISBN 0-7167-5723-0. I believe that open communications channels between all of us add significantly to the value of the class. You are welcome to contact me – preferably via e-mail. In particular, ALL questions and comments are welcome. I do not use Blackboard. Instead, I maintain a web page for this class. To this end, get to my URL listed above, select this class, and you will find yourself in an "announcement file" for this course. This file includes references to related documents, such as this syllabus, sample questions, and PowerPoint presentation, in addition to the latest announcements related to the class. The announcements in this file override the syllabus, and you are responsible to check it on a regular basis.

CLASS ATTENDANCE AND HONOR CODE

You are expected to attend all classes, and are responsible for all announcements made in class or in the announcement file. The university's honor code will be adhered to. Cheating, copying, or plagiarism will result in an automatic failing grade for the problem, quiz, exam or project for all those participating in the cheating or copying, and may lead to a failing grade in the course for all those students who are deemed to have consciously contributed to the cheating.

COURSE WORK AND GRADING

The course work includes three quizzes and 2 exams, which will include both multiple choice as well as numeric and descriptive problem solving questions. The final grade is based on a weighted sum of the course work grades: Each quiz is worth 10%, the mid-term is worth 30%, and the final is worth 40%. Letter grade assignment: A for the top 10% of the weighted sum (i.e., 90% and above), B for the next 10% (i.e., $80\% \leq \text{weighted sum} < 90\%$), C for the next 20% (i.e., $60\% \leq \text{weighted sum} < 80\%$), F below that. You have one week after posting of grades following quizzes and exams to resolve grading issues. If you have to miss a quiz or exam, contact me **in advance** to arrange

a makeup; other make-ups will not be given, except for cases of emergencies.

Don't nitpick about the grading. Persons who complain will not be rewarded for it; those who have the decency not to complain would deserve the same break. A request to look at one problem leads to re-grading of the whole paper, which often leads to a lower grade.

No "extra credit" opportunities will be offered or assigned to specific individuals under any circumstances; all students' grades will be based on the same components - this is an equal opportunity course.

TENTATIVE & APPROXIMATE COURSE SCHEDULE

This schedule is subjected to changes, e.g., due to spending more time on a particular issue

| Class | Date | Class Subjects | Reading / Activity |
|-------|--------|---|-----------------------------------|
| 1 | 17-Jan | Review of basic statistics and probability | 1.2, 1.3, 2.2, 2.3, 3.1, 4.2, 4.4 |
| 2 | 24-Jan | Review of basic statistics and probability | 6.1, 6.2, 6.3, 6.4, 7.1, 8.1 |
| 3 | 31-Jan | Statistics for quality | Ch. 12 |
| 4 | 7-Feb | Statistics for quality (cont.) Two-way tables | Ch. 12 Ch. 9 |
| 5 | 14-Feb | Quiz 1 on chapter 12 Linear regression | Ch. 10 |
| 6 | 21-Feb | Linear regression (cont.) | Ch. 10 |
| 7 | 28-Feb | Quiz 2 on chapter 10 Multiple regression (cont.) | Ch. 11 |
| 8 | 6-Mar | Multiple regression (cont.) | Ch. 11 |
| 9 | 13-Mar | *** Midterm exam on all the former material *** | |
| 10 | 20-Mar | Time series forecasting | Ch. 13 |
| | 27-Mar | *** Spring vacation *** | |
| 11 | 3-Apr | Time series forecasting (cont.) | Ch. 13 |
| 12 | 10-Apr | One-way analysis of variance | Ch. 14 |
| 13 | 17-Apr | Quiz 3 on chapter 14 Two-way analysis of variance | Ch. 15 |
| 14 | 24-Apr | Two-way analysis of variance | Ch. 15 |
| 15 | 1-May | *** Final exam (due to a conference in the next week) *** | |