INTRODUCTORY BUSINESS AND ECONOMIC FORECASTING

Economics 4160  Fall 2006
Class Time: MWF 3:05-3:55
Classroom: IC 113
Professor: Haizheng Li
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COURSE DESCRIPTION
The purpose of this course is to provide an introduction to business forecasting methods. We will focus on quantitative approaches to forecasting. In particular, students will learn three approaches: exponential smoothing, ARMA models (autoregressive integrated moving average), and forecasting with regression models, all are widely used in business applications.

TEXTBOOK
F. X. Diebold, Elements of Forecasting, South-Western College Publishing (required)
P. Newbold & T. Bos, Introductory Business & Economics Forecasting, South-Western Publishing

HOMEWORK AND COMPUTER ASSIGNMENTS
Homework and computer projects will be assigned every week. All homework will be graded. EVIEWS will be used in this class.

HOMEWORK TURNED IN LATE WILL NOT BE ACCEPTED.

QUIZZES
There will be 3-5 in-classes quizzes, and students can drop one quiz with the lowest score.

SCHEDULE
Exam I: October 13 Friday (in class)
Exam II: December 1 Friday (in class)
Project Week: December 4-8

NO MAKE-UP EXAM WILL BE GIVEN.
NO RE-GRADING AFTER ONE WEEK FROM TEST/HOMEWORK RETURN.

COURSE GRADE
Homework/project 25%
Quizzes 20% (drop one)
Exam I 30% for Max(Exam I, Exam II)
Exam II 25% for Min(Exam I, Exam II)

ATTENDANCE
I will take attendance irregularly. Every attendance is worth 5 points of extra credits adding to one homework score.

COURSE OUTLINE
1. Time series and their components, seasonal adjustment (NB Ch. 5; Diebold Ch. 1 & 2)
2. Exponential smoothing algorithms (NB CH. 6; Diebold Ch. 12)
3. Modeling and forecasting trend and seasonality (Diebold, Ch. 4 & 5)
4. Modeling and forecasting cycles--ARMA models (Diebold Ch. 6, 7, 8, 9)
5. Forecasting with regression Models (Diebold 10, optional)
6. Evaluating and Combining forecasts (Diebold Ch. 11; NB Ch.12 & 13)