

Colorado School of Mines
Division of Economics and Business
Spring Semester 2005
Economic Forecasting • EBGN 495
TU-TH 9:30 – 10:45 AM • CO 210

Instructor

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Office Hours – TU/TH 11:00 – 11:30, 2:30 – 4:30, and by appointment

Course Description

Many millions of dollars are spent annually on forecasts. These forecasts can be subjective, where information about a situation is combined with some unspecified judgment process to come up with a forecast. Alternatively an objective forecast can be conducted which involves developing a model which is generally constructed by studying past relationships between the item to be forecast and the factors thought to affect it. A disadvantage of subjective forecasting is that there is no systematic way to improve forecast accuracy by learning "correct" techniques. Objective forecasts on the other hand provide a basis for evaluating forecast accuracy and for developing confidence ranges for forecasts. This course concentrates on these objective methods of forecasting.

Required Readings

Diebold, F.X., Elements of Forecasting (Third Edition), 2004

Supplemental Course Material

Hill, Carter, Learning SAS - A Computer Handbook for Econometrics
Frances, Philip Hans, Time Series Models for Business and Economic Forecasting

Teaching Method

This course is focused around the statistical analysis of time series data. I use a combination of interactive lectures, class discussion and assignments to communicate the main learning objectives. Forecasting problems can be divided into three types. The first type involves forecasting the amount of something, e.g., sales, exchange rates, birth rates, or temperature. The second type of forecast involves the timing of some event, such as the date on which a machine part will fail. The third type of forecast involves the probability of some events occurring, such as the probability of rain on July 15, 2005. We will concentrate on the first of these types of forecasts – forecasts of amounts. These are the most common of forecasting problems encountered in business and economics.

Please see me during the first two weeks of class if you have a documented disability and need academic adjustments or special accommodations. All discussions will remain confidential.

Grading Criteria and Method

Individual and team skills are used within the context of this course. The purpose of multidimensional grading criteria is to provide opportunities to exercise each category of skills, all of which are central to being a successful manager. Specifically, course grades are determined as follows:

1.	Homeworks	35%
2.	Exams	40%
4.	Team Forecasting Project	25%

The responsibility for attending class sessions rests with each individual student in accordance with his/her individual objectives. Attendance will not directly affect your course grade, but you alone are responsible for material covered, assignments and contributions to the team project.

More detailed course grade information is discussed below.

Course Requirements

Homework 35 %

A number of short(ish) homework assignments will be given during the semester. The first assignment will handed out on January 25. All homework assignments are to be conducted independently. Please sign the honor code to this effect and hand it in with each assignment. Instructions for the homework assignments will be handed out in class.

Exams 40 %

Two exams will be given in class on the dates given in the schedule. Exams will cover material up through the day of the exam. The questions at the end of each chapter are a useful study guide to help prepare for the exams.

Team Forecasting Project 25%

Working in teams of two you will conduct an analysis of energy consumption and temperature data. More detailed information on this assignment will be provided a separate handout.