

**Boston College
Economics Department**

EC229-Forecasting

Class Time: Wednesday (4:30 -7:00 P.M.)

Office Hours: Tues. 9:00-10:30; 1:30 - 3:00

Thurs.9:00 -10:30; 1:30 - 3:00

e-mail: mcgowan@bc.edu

Richard McGowan,S.J.

Office : Fulton 424A

Phone:

552-3474(Room & Office)

Course Description:

The goal of this course is two fold: (1) to provide an introduction to the theory and methods of time series forecasting; (2) to enable the student to apply that theory to actual business and economic time series data. Hence, the course will have both “theoretical” and “practical” components. The only prerequisite for the course is EC151 (Statistics). The course does not require an advanced level of mathematics (i.e., calculus), but it does require strong abilities in algebraic and statistical reasoning.

The assignments will largely involve numerical calculations. These are most easily performed on a PC using a statistical package. There are two statistical packages available at the OCF that can be utilized namely, SPSS and Eviews. Both are available on Windows or MacOS. If you wish to use Minitab or other statistical packages, please feel free to do so.

Methodology:

Since variety is the spice of life and we have a 2 1/2 hours class, the class will consist of a combination of lecture, case analysis, group presentations, as well as determining the implications that a forecast would have on a businessperson’s planning strategy.

Evaluation:

- 25%- Midterm exam
- 15% - Two Group Written Case Analyses
- 10%- One Group Presentation
- 10% - Group Project
- 35%- Final Exam

Text for the Course:

Forecasting: Methods and Applications: Makridakis, Wheelwright & Hyndman, 3rd edition, Wiley.

I will be handing out various assignments and cases as we go along. Every week I will have an assignment sheet for you along with questions for the case or assignment.

Date	Topics	Assignment for next class (Chapter in Makridakis)
Jan. 20	Review of Statistics, What is Time Series	Chap.1
Jan. 27	Elements of Time Series Evaluating a Forecast Transformations	Chap. 2
Feb. 3 Feb.10	Moving Average Techniques	Chap. 3
Feb.17	Exponential Smoothing	Chap. 4
Feb.24	Midterm Exam (1.5 hr.) Simple Regression	(Chaps.1-4)
March 10	Simple Linear Regression	Chap. 5
March 17 March 24	Multiple Regression	Chap. 6
April 7 April 14-----	ARIMA Models	Chap. 7 (Group Project Due)
April 21	Intervention Analysis	Chap. 8
April 28	Group Presentations (Each group will make a ten minute presentation of their group project)	

Final Exam- Wednesday, May 12th (4:30 – 7:00)