

**Boston College
Economics Department
CSOM Operations Department**

MD606/EC229-Forecasting

Class Time: Wednesday (7:00-9:30 P.M.)
Office Hours: Tues. 3:00-5:00
 Thurs. 5:00-7:00

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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 an elementary 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 is a statistical packages available at the OCF or the lab in Fulton that can be utilized namely, SPSS and. It is 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:

30%- Midterm exam
20% - Group Written Case Analyses and Homework
20%- One Group Project and Presentation
30%- Final Exam

Text for the Course:

Forecasting: Methods and Applications: Makridakis, Wheelwright & Hyndman, 3^d 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)
Sept.7	Review of Statistics, What is Time Series	Chap. 1
Sept.14	Elements of Time Series Evaluating a Forecast Transformations	Chap. 2
Sept.21 Sept.28	Causal Techniques Simple Regression	Chap. 5
Oct.5 Oct.12	Multiple Regression	Chap. 6
Oct.19	Midterm Exam (1.5 hr.) Non-Causal Methods	(Chaps.1,2,5.6)
Oct.26 Nov.2	Moving Averages Techniques	Chap. 3
Nov.9	Exponential Smoothing	Chap. 4
Nov.16	ARIMA Models	Chap. 7
Nov.30	Intervention Analysis	Chap. 8
Dec.7	Group Presentations (Each group will make a ten minute presentation of their group project)	

Final Exam- Thursday December 14 (7:00-9:30)

