ECON 420: Forecasting Lab

Spring 2017

Department of Economics, California State University, Long Beach

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Office: SPA 355 Location: SPA 207

Office Hours: By Appointment Meeting Times: Thursday 1:00 - 2:45pm

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Course Description

Principles and methods of forecasting. Evaluation of the reliability of existing forecasting techniques. Also covers use of the macroeconomic model as a basis for forecasting and the role of forecasts in the formulation of national economic policy.

Students are required to attend computer lab sessions where students will apply the principles learned in classes and produce the actual forecasting results using eViews. You may purchase a student version of eViews so that you can also work at home for practice. In each week, there will be a lab assignment. These exercises will teach you how to apply the concepts presented during lecture to real-world data using eViews. Lab assignments are expected to be completed and submitted during lab meetings. There will also be a lab final exam. Attending lab meetings is mandatory.

Required Materials

Forecasting for Economics and Business by Gloria Gonzalez-Rivera. Addison-Wesley, 2013.

Course Requirements

Assignments

10-12 Assignments (10 points each) given in class and due 3 days after class.

Academic Honesty and Student Conduct

• Academic Honesty

Should you decide to cheat on any portion of an assignment or exam, you will receive a letter

grade of "F" for the entire course and will be subject to additional academic actions. Please refer to the University Catalog for definitions of "cheating", "plagiarism", and academic actions pertaining thereto.

• Class Discussion

The University is a place to interact with different ideas and explore their support arguments and justification. Academic discussion is only beneficial if we remember to be respectful of opposing ideas and that personal attacks are never acceptable. Remember, the goal is to engage with individual's ideas, not the individuals themselves.

• Tardiness

Students who come late (or must leave early) are asked to enter/depart the classroom in the least disruptive manner possible. This includes sitting near the door if you anticipate leaving early or taking a seat as near to the door as possible if you arrive late.

• Cell Phones

Please refrain from using your cell phones during class because it is distracting to other students. Also, please put your cell phones on vibrate/silent during class.

• Laptops and Tablets Using a laptop or tablet for note taking or referencing course material is acceptable, however please do not use them for tasks unrelated to the course. Be mindful that this can easily distract other students. If can cannot follow these instructions, your privileges will be revoked.

Course Outline

Tentative Schedule:

Thursday	
Jan 26th	1
Chapter 1: Course overview: What is forecasting?	
Appendix A: Review of statistical concepts	
Lab Assignment: No Lab	
Feb 2nd	2
Chapter 2: Review of basic linear regression	
Lab Assignment 1	

Thursday	
9th	3
Chapter 3: Statistics and time series	
Lab Assignment 2	
16th	4
Chapter 4: Tools of the forecaster	
Lab Assignment 3	
23rd	5
Chapter 5: Understanding linear dependence	
Lab Assignment 4	
Mar 2nd	6
Chapter 6: Forecasting with MA processes	
Lab Assignment 5	
9th	7
Exam I	
No Lab	
16th	8
Chapter 7: Forecasting with AR processes	
Lab Assignment 6	
23rd	9
Chapter 7: Forecasting with AR processes, cont'd	
Lab Assignment: Term Paper Prep.	
30th	
Spring Break	
Apr 6th	10
Chapters 8 & 9: Forecasting practices I, II	
Lab Assignment 7	
13th	11
Chapter 10: Forecasting the long term: Deterministic and stochastic trends	
Lab Assignment 8	

Thursday	
20th	12
Chapter 11: Forecasting with a system of equations: Vector autoregression	
Lab Assignment 9	
27th	13
Chapter 12: Forecasting the long term and the short term jointly	
Lab Assignment: Term Paper Prep.	
May 4th	14
Chapters 13 & 14: Forecasting volatility I, II	
Lab Assignment: Term Paper Prep.	
11th	15
Final Exam	
Lab Assignment: No Lab	