



ST. CLOUD STATE UNIVERSITY
Department of Economics
ECO 470 / 570 – Economic and Business Forecasting
Course Syllabus – Fall 2014

Instructor: Dr. Nimantha Manamperi
Place and Time: SH 306, TR, 2.00 pm – 3.15 pm
Office: SH 373
Office Hours: MWF: 1.00 pm – 2.00 pm *or by appointment*
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Course Description: Forecasting is used to predict the future events or conditions. Therefore it allows us to make better decisions with low uncertainty. The primary objective of this course is to deliver the students with an understanding of the fundamentals of forecasting and its applications in the economic and business environment. The basic regression, time series econometrics, model building and specification, and hypothesis testing will be reviewed, followed by in-depth examination of various modern forecasting techniques used in economics. Students will also be given a hands on experience in various forecasting software.

Prerequisites: ECON 205, ECON 206; IS 242 or STAT 219 or STAT 229

Reading Material: **(Required)** : “Elements of Forecasting” by Francis X. Diebold, 4th Edition (ISBN -13: 9780324323597) .

(Optional) : “Practical Time Series Forecasting” by Galit Shmueli, 2nd Edition (ISBN-13: 9781468053456).

(Optional) : “Forecasting in Business and Economics” by C.W.J. Granger, 2nd Edition (ISBN: 0122951816).

(Optional) : “Forecasting, Time Series, and Regression” by Bowerman, O’Connell and Koehler, 4th Edition (ISBN-13: 9780534409777).

Class Notes

Software Material: www.eviews.com , gretl.sourceforge.net, www.minitab.com

Learning Outcomes:

Upon completion of this course, students should be able to:

- Understand the importance of forecasting in making accurate decisions in economic and business environments.
- Understand the basics in regression analysis, time series analysis and their applications in forecasting.
- Understand how to handle the trend, seasonal and cyclical issues in forecasting analysis.
- Construct forecasting reports to higher level management for vital decision making process.
- Use the software packages for developing forecasting models.
- Be prepared for more advanced study of economic and business forecasting.

Assessments:

- Three Quizzes.
- Six Assignments. (Due every two weeks and the lowest grade will be dropped)
- Midterm Exam. (Thursday, 11/20/2014)
- Final Project. (Due by 1.00 pm on Tuesday, 12/16/2014)

Evaluation:

Quizzes (10% each)	30%
Assignments (4% each)	20%
Midterm Exam	20%
Final Project	25%
Class Attendance	5%
Total	100%

Grading Policy: A+ (95% - 100%), A (90%-94.9%), A- (89% - 89.9%), B+ (85%-88.9%), B (80% - 84.9%), B- (79% - 79.9%), C+ (75%-78.9%), C (70% - 74.9%), C- (69% - 69.9%), D (60% - 68.9%), F (59.9% or less)

The Three Quizzes and the Six Assignments:

The three quizzes and the six assignments highly demand your competencies in econometric software such as eviews and gretl. You must submit the completed work at the beginning of the class time on the due date. Late work will not be accepted in any means. If you plan to travel, attend a conference or participate in an away game for the SCSU, make sure to submit your work early.

Final Project:

This individual project requires you to submit a 10 page report. You must submit your work exactly at 1.00 pm on 12/16/2014. Late submissions will automatically be given a zero grade. Further information will be given during the second week of the semester.

Exams Excuses:

If you miss the midterm exam and you presented an official and verified excuse, you will be allowed to makeup the exam that you missed as early as possible. However you must present the excuse notice within 3 days of your absence. Some examples of 'valid' absences are: medical conditions, religious holy days, or representing SCSU at external events (conferences, 'away' games, etc.). No private excuses will be accepted in any means.

Software Usage:

Gretl can be downloaded freely (gretl.sourceforge.net). However you must use the economics department computer lab for the Eviews and Minitab. Our primary focus will be on Eviews. You will be given two days of lectures on how to use these software.

Notes:

1. Students are expected to assist in maintaining a classroom environment which is conducive to learning. In order to assure that all students have an opportunity to gain from time spent in class, unless otherwise approved by the instructor, students are prohibited from using cellular phones, eating or drinking in class, making offensive remarks, using laptops for non-related class activities, reading newspapers, sleeping or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in, minimally, a request to leave class.
2. Attendance is required. You must **maintain at least 80%** of attendance during the semester.
3. A simple calculator should be used for the exams. Smart phones will not be accepted as a calculator.
4. American with Disability ACT: SCSU will provide reasonable accommodations for all persons with disabilities so that learning experiences are accessible. If you experience physical or academic barriers based on disability, please see SCSU

Disability & Accessibility Services to discuss options. Students must provide their instructor(s) with an accommodation letter before any accommodations can be provided. Accommodations cannot be provided retroactively. Please meet with your instructor(s) in a confidential environment to discuss arrangements for these accommodations.

5. Students are expected to have their ID's with them in class. The instructor reserves the right to ask a student to show his/her ID, especially during exams.
6. Any instance of cheating and/or plagiarism will result in an (F) for the course. The instructor reserves the right to pursue the matter further.
7. Using a laptop for class activities is acceptable. However if you use a laptop for non-class activities, it will result in revocation of your laptop privileges during class.
8. You are not allowed to use your phone in the class.

THE CLASS SCHEDULE	
Chapter 1	Introduction to Forecasting
Chapter 2	Simple Linear Regression
Chapter 3	Multiple Linear Regression
Chapter 4	Time Series Regression
Chapter 5	Modeling and Forecasting Trend
Chapter 6	Modeling and Forecasting Seasonality
Chapter 7	Characterizing Cycles
Chapter 8	Modeling Cycles
Chapter 9	Forecasting Cycles
Chapter 10	Forecasting with Trend, Seasonality and Cycles
Chapter 11	Non Linear Forecasting Models <i>(If Time Permits)</i>