SYLLABUS

ECON 6650 Forecasting in Economics and Finance

Semester: Spring 2008
Location: The University of Georgia, Tbilisi
Lecture and Discussion: Two Hours
6 Credits (ECTS)

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Office Hours: One hour before class and by appointment

COURSE DESCRIPTION

This course provides an introduction to forecasting in economics and finance. Through a combination of theoretical analysis and hands-on experience, students will learn about macroeconometric forecasting—What does a large econometric model of an economy look like? Students will learn how to apply series forecasting methods to actual data. Exponential smoothing and Bayesian methods are also considered. How well do actual forecasters forecast? Recent theoretical and empirical research is examined in order to assess how far into the future forecasters have been able to see.

PERFORMANCE OBJECTIVES

1. **Define** the most commonly used terms in the discipline of business forecasting.
2. **Estimate** unknown population characteristics from sample evidence.
3. **Formulate** hypotheses involving commercial and industrial processes.
4. **Analyze** business situations requiring decisions under conditions of uncertainty.
5. **Design** experiments exploring data patterns and requiring a forecasting technique.
6. **Create** a plan for collecting, using, and evaluating data for forecasting.
7. **Assess** the appropriateness of models using simple linear regression and multiple regression analysis.
8. **Recommend** a technique for forecasting economic and business conditions for selected sectors.
9. **Summarize** the results of analyses using the Box-Jenkins (ARIMA) methodology.
10. **Evaluate** the various methods commonly used to manage the forecasting process.

REQUIRED TEXT

Business Forecasting, Hanke & Wichern, 8th edition.

GRADING POLICY

Grades will be based on four factors:

(1) Everyday activity, quizzes, homework 15%: Based on: a) Attendance at classes, b) quizzes, and c) homework assignments.* Students are expected to attend classes, do the assigned reading, and complete assignments on time. Attendance at lectures and discussions is a basic requirement for all students. If you are unable to attend a class, you must inform your professor prior to the beginning of that class. If you have missed 1/3 of the classes during the semester, you should take this course again.

NOTE: Handwritten homework assignments will not be accepted. All work must be done on a computer.

(3) Midterm examination 25%: The examination, conducted in the 8th week, will cover all work through the 7th week.

(4) Presentation 25%: Each student will design, conduct, and present the results of a research project using the knowledge gained in the course. Evaluation will be based in part on the extent to which the project may benefit the Georgian people. Students will present the results of their research project to the class. 15 points will be reserved for the quality of the research paper on which the presentation is based, 10 for the presentation itself.

(5) Final examination 35%: The final examination will be comprehensive, covering the entire semester's work. *A score of 24.5 out of 35 in the final examination is required in order to pass the course.*

CALCULATION OF THE FINAL GRADE:

A+	97 – 100%							
A	94 – 96%	B	84 – 86%	C	74 – 76%	D–	60 – 65%	
A–	90 – 93%	B–	80 – 83%	C–	70 – 73%	E	51 – 59%	
B+	87 – 89%	C+	77 – 79%	D	66 – 69%	F	<51%	

Students with Disabilities

Students with disabilities (e.g., visual, hearing, mobility) should let the professor know so we can make appropriate arrangements.

Academic Integrity Policy

The academic integrity policy is as follows: Definition of Academic Integrity Policy: Any test or assignment that has been given to an individual to be completed independently is completed independently without assistance from another student or outside source of information. When consultation is permitted, students will identify those with whom they consult. Plagiarism is a breach of the University's Academic Integrity Policy. Each student signs the *Integrity Pledge*.

First Offense: Students caught cheating will fail on whatever work they are caught cheating on and will not be allowed to re-do the work.

Second Offense: The student will be expelled from class; the final grade assigned for the course will be a "Fail."

The administration reserves the right to expel a student from the degree program if there are more than two offenses. Aiding and abetting in cheating is considered as grave as initiating the cheating—and will be treated in the same manner.

Lecture Topics and Reading Assignments

Week 1 January 29	Introduction to course, syllabus, and the field of business forecasting. Critical thinking and logical fallacies. *Discuss research project and student presentations. Each student will make a presentation in Week 14, 15, or 16.* How to make a PowerPoint presentation without boring your audience to tears or requiring them to use binoculars. Rustaveli Project and the University community. Introduction to and volunteer job opportunities with *THE GEORGIA FORECAST*™. Presentation: *The Future.*
Week 2 February 5	Before coming to class: Read Chapter 1, Introduction to forecasting. Be sure to read the cases and "Excel Applications" at the end of Chapter 1. Write a brief essay on the topic, "MY EXPECTATIONS AND CONCERNS ABOUT THIS COURSE." **_Use a computer._** Provide hard copy or e-mail: edraupp@gmail.com.
Week 3 February 12	Read Chapter 2, A REVIEW OF BASIC STATISTICAL CONCEPTS. Select one of the three cases, 2-1, Alcom Electronics; 2-2, Mr. Tux; or 2-3, Alomega Food Stores. Answer the question(s) at the end of the case. **_Use a computer._** Provide hard copy or e-mail: edraupp@gmail.com.
Week 4 February 19	Read Chapter 3, EXPLORING DATA PATTERNS AND CHOOSING A FORECASTING TECHNIQUE. Select one of the cases, 3-1A or B, Murphy Brothers Furniture; 3-2, Mr. Tux; 3-3, Consumer Credit Counseling; or 3-4, Alomega Food Stores. Answer the question(s) at the end of the case. **_Use a computer._** Provide hard copy or e-mail: edraupp@gmail.com.
Week 5 February 26	Before coming to class: Read Chapter 4, MOVING AVERAGES AND SMOOTHING METHODS. Select one of the cases, 4-1, The Solar Alternative Company; 4-2, Mr. Tux; 4-3, Consumer Credit Counseling; 4-4, Murphy Brothers Furniture; or 4-5, Downtown Radiology. Answer the question(s) at the end of the case. **_Use a computer._** Provide hard copy or e-mail: edraupp@gmail.com.
Week 6 March 4	Before coming to class: Read Chapter 5, TIME SERIES AND THEIR COMPONENTS. Select one of the cases. Answer the question(s) at the end of the case. **_Use a computer._** Provide hard copy or e-mail: edraupp@gmail.com.
Week 7 March 11	Before coming to class: Read Chapter 6, Simple linear regression. Select one of the cases at the end of the chapter. Answer the question(s) at the end of the case. **_Use a computer._** Provide hard copy or e-mail: edraupp@gmail.com.
Week 8 March 18	***Mid-term examination covers all work through Week 7. This includes Chapters 1 through 6.***
Week 9 March 25	Before coming to class: Read Chapter 7, MULTIPLE REGRESSION ANALYSIS. Select one of the cases at the end of the chapter. Answer the question(s) at the end of the case. **_Use a computer._** Provide hard copy or e-mail: edraupp@gmail.com.
Week 10 April 1	Before coming to class: Read Chapter 8, REGRESSION WITH TIME SERIES DATA. Select one of the cases at the end of the chapter. Answer the question(s) at the end of the case. **_Use a computer._** Provide hard copy or e-mail: edraupp@gmail.com.
Week 11 April 8	Before coming to class: Read Chapter 9, THE BOX-JENKINS (ARIMA) METHODOLOGY. Select one of the cases at the end of the chapter. Answer the question(s) at the end of the case. **_Use a computer._** Provide hard copy or e-mail: edraupp@gmail.com.
Week 12 April 15	Before coming to class: Read Chapter 10, JUDGMENTAL FORECASTING AND FORECAST ADJUSTMENTS. Select one of the cases at the end of the chapter. Answer the question(s) at the end of the case. **_Use a computer._** Provide hard copy or e-mail: edraupp@gmail.com.
Week 13 April 29 **REVISED**	Before coming to class: Read Chapter 11, MANAGING THE FORECASTING PROCESS. Select one of the cases at the end of the chapter. Answer the question(s) at the end of the case. **_Use a computer._** Provide hard copy or e-mail: edraupp@gmail.com.
Week 14 May 6 **REVISED**	Before coming to class: READ HANDOUTS TO BE PROVIDED. Answer questions and turn in your assignment. **_Use a computer._** Provide hard copy or e-mail: edraupp@gmail.com. **Student presentations start.**
Week 15 May 13 **REVISED**	Before coming to class: READ HANDOUTS TO BE PROVIDED. Answer questions and turn in your assignment. **_Use a computer._** Provide hard copy or e-mail: edraupp@gmail.com. **Student presentations continue.**
Week 16 May 20 **REVISED**	Before coming to class: READ HANDOUTS TO BE PROVIDED. Answer questions and turn in your assignment. **_Use a computer._** Provide hard copy or e-mail: edraupp@gmail.com. Turn in your research paper.* *Your paper should reflect a high level of critical thinking.* **Final day for student presentations.**
Week 17 May 27 **REVISED**	***FINAL EXAMINATION. The examination will be comprehensive, covering the entire semester's work, and may consist of objective items, short answers, and essay.* As noted above, a score of 24.5 out of 35 in the final examination is required in order to pass the course.***

*Essays and research papers will be graded using the GUSS standard scoring rubric.

NOTE: This is a challenging course, but there is no reason to be afraid of it. Do the readings and the homework and you will have a high probability of passing the course with a good grade. If you ever get stuck, or you just don't understand a concept, see me. I can help.