

FORECASTING (ECON 3460/6430): Fall
William J. Smith (Joey Smith) - (678) 839-4779 - 1303 Business
OFFICE HOURS: all at RCOB Office 1303

T (3:15 pm – 7:00 pm) OR W (1:00 pm – 5:15 pm) OR TH (3:15 pm – 5:15 pm)...Other times, by appointment

COURSE DESCRIPTION: Emphasis is on the application of various forecasting methods with regard to analyzing and projecting future business and economic conditions at the national, regional, industry, and firm levels. This course is intended to be very hands-on. The goal is to provide you with a set of tools that you can use to analyze data. The course will extensively use Microsoft Excel, its data analysis capabilities, along with SAS, an industry standard business intelligence software package used in economics for both forecasting and other types of statistical research.

SAS CERTIFICATE PROGRAM: This class is part of the UWG SAS Certificate Program. The program consists of Econ 3402, Econ 3406, Econ 3460 (forecasting), and Econ 4485 (econometrics). Successful of ECON3402 and ECON3406 with a grade of “C” or better, and completion of this class (ECON3460) and ECON4485 with a “B” average or better are required to earn the SAS Certificate. The program requires two significant individual projects utilizing SAS, along with a public presentation with faculty AND outside business people in the audience (e.g, Big Night, a professional conference, SAS Day). Typically, this requires contacting a faculty member and obtaining their sponsorship for Big Night or equivalent. Note that research quality is important when soliciting faculty involvement in your research.

PREREQUISITES: ECON 2105, ECON 2106, ECON 3402, or equivalent of each.

TEXT: Business Forecasting, Edition 5 or 6 will do, Wilson and Keating (see links on CouseDen header).

COMPUTER SOFTWARE: Microsoft Excel plus add-ins, SAS (available in Lab and though web access).

ATTENDANCE: Attendance is required for each class. Students are fully responsible for all announcements and material covered in class. Those not attending class will not receive individual instruction on assignments and the forecasting project. Likewise, they will not receive extra consideration with regard to borderline grade decisions, etc. Classes will begin promptly at the scheduled time.

EVALUATION:

CourseDen Quizzes and Outside-of-Class SAS Assignments 20%

Exam (ch 1-3) 25%

Exam (ch 4-7) 25%

Individual Forecasting Project** 25% (research, paper, presentation)

(**for MBA Classes, this is a group assignment)

Various in-class Assignments, SAS exercises and Participation* 5%

FORECASTING ASSIGNMENTS: At least 1/2 of the final grade will be based on assignments to be completed outside class. All assignments are to be completed INDEPENDENTLY unless EXPLICITLY stated otherwise. If group assignments are made, Independent means no collaboration between groups. These assignments will use various quantitative techniques covered in the text to develop and evaluate forecasts. These assignments will require the extensive use of MS Excel and its extensions, SAS and access to the Internet. Assignments will not be accepted after the due date.

INDIVIDUAL FORECASTING PROJECTS: 20% of the final grade will be based on an individual or group forecasting project in which each student or student group will develop a multiple regression forecasting model in an area of interest. The forecasting project grade will depend both on the project itself and on the IN-CLASS PRESENTATION of the project. All sources must be cited. Students must submit a project proposal in writing for my approval by September 15th, 2010. See me prior to this date if you are having problems. (DO NOT WAIT UNTIL THE LAST MINUTE).

CHEATING: Academic dishonesty on any assignment will result in a zero on the assignment, an F for the course, a note recording the incident on the student's permanent record and the student reported to the Vice-President of Student Services for appropriate disciplinary action by the University.

WITHDRAWALS: A student who withdraws during the first half of the term will receive an automatic W. A student who withdraws after the midpoint of the term will receive a WF unless the student is administratively withdrawn from the University. The student is fully responsible for formally withdrawing from the course. If the student does not formally withdraw, the instructor will assume the student is still in the course and assign a grade of F for the course.

INCOMPLETES: A student will not be given the grade I unless non-academic circumstances beyond the student's control occur which prevent the student from completing a small segment of the course such as the final exam. For a student to receive a grade of I, he or she must be doing passing work up to the point that he or she can't continue. The Dean of the Richards College of Business must approve all incompletes.

E-MAIL: The official channel of communication outside of class will be through your myUWG Email account and CourseDen. To protect your confidentiality, I CAN NOT respond to any other email account. This is departmental policy, not just my policy.

CELL PHONES: All cell phones must be turned off during class in the College of Business. No cell phone may be on or out during exams.

FOOD AND DRINK: Food and drink are not allowed in classrooms in the College of Business.

MODIFICATIONS TO THE SYLLABUS: I reserve the right to make changes to the syllabus if the need arises. However, this will happen ONLY in extenuating circumstances.

COURSE OUTLINE:

Part I – Introduction To Forecasting Methods

Chapter 1 - Introduction to Business Forecasting

Chapter 2 - Forecast Process, Data Considerations, and Model Selection

SAS Primer (The interfaces of SAS)*

Part II -Single Variable Forecasting Methods

Chapter 3 - Moving Averages and Exponential Smoothing Models

SAS Primer (working with data sets, reading/writing files, descriptive statistics, tabulations)*

Midterm

Part III - Forecasting With Regression Models

Chapter 4 - Introduction to Forecasting with Regression Methods

SAS Primer (Proc Reg, time-trend modeling)

Chapter 5 - Forecasting with Multiple Regression

SAS Primer (Proc Reg, Proc Logistic, Proc Probit)*

Part IV -Business Cycles & Economic Indicators

Chapter 6 Time Series Decomposition

Chapter 7 ARIMA Models (proc ARIMA, and Time Permitting, ETS components of SAS)

Somewhat Comprehensive Exam (don't panic)

COURSE OBJECTIVES:

(LG1) The student will learn communicate effectively in oral presentations and writing. **(LG5, LG6)** The students will acquire basic skills in information and business technology. They will learn to access data for developing forecasts using a variety of sources and they will demonstrate an ability to transfer data from one medium to another and use common business application to analyze data by generating and interpret descriptive statistics. **(LG2)** Students will learn business decision-making skills based on analysis.

AMERICANS WITH DISABILITIES ACT STATEMENT: If you are a student who is disabled as defined under the Americans with Disabilities Act and requires assistance or support services, please seek assistance through the Center for Disability Services. A CDS Counselor will coordinate those services. See <http://www.westga.edu/~dserve/>

EQUAL OPPORTUNITY STATEMENT: No person shall, on the grounds of race, color, sex, religion, creed, national origin, age, or disability, be excluded from employment or participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity conducted by UWG.

AFFIRMATIVE ACTION STATEMENT: University of West Georgia adheres to affirmative action policies to promote diversity and equal opportunity for all faculty and students.

DISCLAIMER: Unforeseen events may cause changes to the scheduling of projects, assignments, quizzes, etc. Every effort will be made NOT to change scheduled items. Nevertheless, I reserve the right to make any changes deemed necessary to best fulfill the course objectives. Students registered for this course will be made aware of any changes in a timely fashion using reasonable means (class announcements, email, website posting).