

FORECASTING (ECON 3460/6430): Fall

William J. Smith (Joey Smith) - (678) 839-4779 - 1307 Miller Building
OFFICE HOURS: all at RCOB Office 1307

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 and the interdisciplinary [Certificate in Data Analytics](#) (link provides details). The SAS Certificate 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 CourseDen header).

COMPUTER SOFTWARE: Microsoft Excel plus add-ins, SAS (available in Lab and though [USG-SRS](#)).

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:

Obtaining SAS from [USG-SRS](#) and Installing SAS on your personal computer 5% (see me if you have a Mac).

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/poster at SAS Day)

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

FORECASTING ASSIGNMENTS: About 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, the word “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: 25% of the final grade will be based on an individual (or group forecasting project for MBA students) 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. 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. All assignments are individual assignments. I encourage discussion on the individual forecasting project, but group work on quizzes or exams is strictly prohibited.

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 with a final attendance date of the last completed assignment or last login into CourseDen.

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 primarily through your myUWG Email to my account at wjsmith@westga.edu and secondarily through CourseDen. I do not check my CourseDen email daily, so for the fastest response, use my regular email. To protect your confidentiality, I CAN NOT respond to any other email account other than your student@my.uwg.edu account. This is departmental and university 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).

WOLF PACT

By enrolling and continuing in this course you agree to the following.

Having read the [Honor Code](#) for the University of West Georgia, I understand and accept my responsibility to uphold the values and beliefs described therein and to conduct myself in a manner that will reflect the values of the Institution and the Richards College of Business so as to respect the rights of all UWG community members. As a UWG student, I will represent myself truthfully and complete all academic assignments honestly and within the parameters set by my instructor. I understand and accept that if I am found guilty of violations (through processes due me as a UWG student and outlined in the UWG Student Handbook), penalties will be imposed. I also recognize that my responsibility includes willingness to confront members of the UWG community if I feel there has been a violation of the Honor Code. Ultimately, I will conduct myself in a manner that promotes UWG as the best place to work, learn, and succeed for my generation, and those to come!

ACADEMIC HONESTY GUIDELINES

This class offers a mix of individual assignments and group activities. All assignments must be submitted individually, even if the nature of the assignment requires or allows you to work in a group. Any quiz, given online or in class, is an individual assignment where collaboration is not allowed. For more information regarding the student honor code, see the link below under the section “Student Rights and Responsibilities.”

Course Learning Objectives Related to BBA Learning Goals

Faculty & Staff
Faculty & Staff Resources
Course Learning Objectives

Credit Hour Policy

Credit Hour Policy (3 credit hours): For approximately fifteen weeks, students in this class will generally spend 150 minutes with direct faculty instruction (either face-to-face or online) and work about 360 minutes outside of the classroom each week. This out-of-class work may include, but is not limited to, readings, assignments, projects, group work, research, and test preparation.

Student Rights and Responsibilities

Please carefully review the information at the following link:

<https://www.westga.edu/UWGSyllabusPolicies/>

The document at this link contains important information pertaining to your rights and responsibilities in this class. Because these statements are updated as federal, state, university, and accreditation standards change, you should review the information each semester.