

Economics 309
Economic Forecasting
Fall – 2014
ECO 309.81E (83055)

Instructor: Stephen Harris
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Office Hours: After class or by appointment
Office: Classroom
Classroom: UCD 435 Lab
This course meets in downtown Dallas at [UCD](#). You will need parking money.
Class Website: <https://leo.tamuc.edu/> Choose eCollege once you login to myLeo.

Catalog Description:

Introduces the student to the economic forecasting approach through which economic theories and policy analysis can be stated and applied. Prerequisites: Eco 231(ECO 2301), Eco 232 (ECO 2302); Math 176 and BA 302 (or GBUS 302).

Textbook:

Business Forecasting, 9th ed., Hanke and Wichern.
Pearson Prentice Hall, 2009. ISBN-10: 0132301202 ISBN-13: 9780132301206 .
<http://www.pearsonhighered.com/hanke/> (Be sure you are looking at the 9th edition.)

Software:

You need to rent the student version of MINITAB 17. OnTheHub.com is an on-line distributor of Minitab software. As a student you can rent Minitab 17 on-line and download it straight to your personally owned computer. You will be required to provide a campus e-mail address (.edu) or other proof of your academic status.

OnTheHub.com offers two rental options. Currently they offer a six month rental of Minitab 17 for \$29.99. They also offer a 12 month rental of Minitab 17 for \$49.99. These licenses are for the full professional version. To rent go to www.onthehub.com/minitab (note do not rent or use Minitab 16 for our classwork.)

Computers and Internet:

This class will utilize Microsoft Excel, Microsoft Word, and/or Minitab for every homework and exam. Students will also need access to the internet. Labs are available at TAMU-Commerce, Metroplex Center in Mesquite, and at UCD.

Components of Grade:

Grade Distribution:

Test 1	(20%)	A: 90 - 100
Test 2	(20%)	B: 80 - 89
Test 3	(20%)	C: 70 - 79
Homework	(20%)	D: 60 - 69
Project	(20%)	F: Below 60

Tests

Test dates will be announced in class, by email, and by posting online in eCollege.

Test 1 will cover Chapters 1-3

Test 2 will cover Chapters 4-6

Test 3 will cover Chapters 7-9

You will only be tested over what we have covered. Your tests will require you to use Excel, Minitab, and/or Word. A test that is missed will receive a grade of "0", unless your professor is notified prior to the test and the excuse is a legitimate medical one or officially approved. Regardless of the excuse, if you miss two tests you will automatically fail the class. It is the student's responsibility to make arrangements for tests that are missed and excused. Again, unexcused missing of a test or an assignment will result in the grade of "0".

Homework:

Homework will be announced in class each week. It will also be posted in eCollege after it is announced. Missing a class meeting is no excuse for not knowing what is required for that week's assignment. Late assignments will not be accepted.

Project:

Details of the project will be provided in class and posted in the eCollege site for the class. It will be due by December 4, 2014.

Tentative Course Plan:

Chapter	Topic	Date
1	Introduction to Forecasting and Excel	8/28
2	A Review of Basic Statistical Concepts	9/4
3	Exploring Data Patterns and Choosing a Forecasting Technique	9/11
Test 1 – Week of 9/18		
4	Moving Averages and Smoothing Methods	9/25
5	Time Series and Their Components	10/2
6	Simple Linear Regression	10/9 10/16
Test 2 – Week of 10/23		
7	Multiple Regression Analysis	10/30 11/6
8	Regression with Time Series Data	11/13
9	The Box-Jenkins (ARIMA) Methodology	11/20 12/4
Test 3 – Week of 12/11		

Important Dates:

25AUG2014 to 12DEC2014: Class in Session

See the Academic Calendar for more details.

<http://www.tamuc.edu/admissions/registrar/academicCalendar.aspx>

Important Notices:

- Please read the statement regarding Civility in the Classroom in the Student Guidebook. It is on page 38 of the [Student Guidebook](#).
- Students of The College of Business at Texas A&M University-Commerce will follow the highest level of ethical and professional behavior. Actionable conduct includes illegal activity, dishonest conduct, cheating, and plagiarism. Failure to abide by the principles of ethical and professional behavior will result in sanctions up to and including dismissal from the university.
- Plagiarism represents disregard for academic standards and is strictly against University policy. Plagiarized work will result in an “F” for the course and further administrative sanctions permitted under University policy. Guidelines for properly quoting someone else’s writings and the proper citing of sources can be found in the APA Publication Manual. If you do not understand the term “plagiarism”, or if you have difficulty summarizing or documenting sources, contact your professor for assistance.
- Students are expected to check the eCollege site regularly for updates in the form of announcements. Also, check your myLeo email often.

Students with Disabilities:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library, Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamuc.edu

Course Objectives

1. Be able to calculate and interpret basic sample statistics.
2. Be able to determine the components of a time series.
3. Distinguish between stationary, nonstationary, and random data.
4. Understand and distinguish between different types of smoothing.
5. Understand the concept of decomposition.
6. Be proficient in using at least one software package to forecast.
7. Understand and interpret simple and multiple regression analysis.
8. Be able to identify the violation to regression assumptions.
9. Understand and run ARIMA Model.
10. Be able to conduct residual diagnostics.

This course is part of the business core.

Student Evaluation Criteria

Criteria	1(Unsatisfactory)	2 (Emerging)	3 (Proficient)	4 (Exemplary)
Understanding of time series data and components using various statistical and graphical tools.	Student can't demonstrate understanding of the components.	Student can identify some components.	Student can identify most components using most of the tools.	Student can identify all components using all the tools.
Understanding of Regression Analysis and application to both time series and cross section data.	Student cannot demonstrate an understanding of regression analysis.	Student demonstrates an understanding of some regression concepts but cannot apply it.	Student demonstrates an understanding of the concept of regression and can apply those concepts.	Student demonstrates an understanding of the concept of regression and can apply to time series and cross section data.
Understanding and application of different univariate time series models including but not limited to Smoothing, Decomposition, and ARIMA.	Student cannot demonstrate an understanding of univariate methods.	Student demonstrates an understanding of some/ all of the univariate time series models but can't apply.	Student demonstrates an understanding of some/ all univariate time series models and apply some of them successfully.	Student demonstrates an understanding of all univariate time series models and apply them successfully.
Identification of the best model from alternative models and obtaining forecasts using at least one software.	Student cannot demonstrate an understanding of the model selection processes.	Student can demonstrate an understanding of 1 out of 3 of these processes.	Student can demonstrate an understanding of 2 out of 3 of these processes.	Student can demonstrate an understanding of the entire processes.