



Eco 309 02E # 80921
Economic Forecasting
COURSE SYLLABUS: Fall, 2015
August 1, 2015

Instructor: Stanley Holmes, Ph.D.

Office Location: Department of Economics

Office Hours: From 2:00 until 4:00 P.M. Mondays and Wednesdays or by Appointment in BA 102

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COURSE INFORMATION

Materials –

Text: *Business Forecasting* 9th ed., Hanke and Wichern.

Pearson/Prentice Hall, Inc, ISBN: 139780132301206

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. Do not rent the Minitab Express version. To rent go to www.onthehub.com/minitab (note do not rent or use Minitab 16 for our classwork.)

You will also need working copies of Microsoft Excel and Word on your computer as well.

Important Dates: Please refer to the academic calendar at:

<http://www.tamu-commerce.edu/registrar/pdfs/academicCalendar09.pdf>

Hardware: You must have a headset with microphone for this class. It is required to participate during class. Be sure to test the equipment before class begins.

COURSE DESCRIPTION

Classroom lectures will be held on Mondays and Wednesdays from 9:30 A.M. until 10:45 A.M. central time in room BA 345. During the lectures we will cover specific chapters and examples mentioned in the syllabus. You may use the BA computer lab or the library computers at TAMUC as an alternative or in addition to your personal computer. You may use the lab computers to follow examples during the lecture. I suggest that you download a copy of Minitab on your personal computer if you wish to use it to complete assignments.

COURSE OBJECTIVE

Objectives of this course is to introduce the student to the basics of quantitative methods and their application to real business situations as well as the use of current software available for forecasting. After taking this course the students will be able to apply different forecasting techniques to empirically test economic theories and business policy analysis and professionally and present the results of their analysis in a formal business report.

COURSE OUTLINE / CALENDAR

Chapter 1 Introduction to
Forecasting

Week of Aug 1

Chapter 2 Review of Basic Statistical
Concepts

Week of Sep 7

Chapter 3 Data Patterns and Forecasting
Techniques

Week of Sep 14

***Project Part 1 (Proposal- 5
points)***

Due by Sep 18

--Includes data collection in Excel and data analysis

Chapter 4 Moving Averages and Smoothing
Methods

Week of Sep 21

***Project Part 2 (up to 2.5 extra credit
points)***

Due by Sep 26

Chapter 5 Time-Series and Their
Components

Week of Sep 28

***Project Part 3 (up to 2.5 extra credit
points)***

Due by Oct 3

EXAM 1 Chapters 1through 5 (25 points)

Week of Oct 5

Chapter 9 Box-Jenkins (ARIMA) Type Forecasting
Models

Week of Oct 5

***Project Part 4 (up to 2.5 extra credit
points)***

Due by Oct 31

EXAM 2 Chapter 9 (25 points)

Week of Oct 26

Chapter 6 Simple Linear Regression

Week of Nov 2

Chapters 7 & 8 Multiple Regression Analysis/Time Series

Week of Nov 16

Project Part 5 (up to 2.5 extra credit points)

Due Dec 5

Completed Class Project Part 6 (20 points)

Due by Dec 8

--Includes the best forecast with each method presented in Excel format along with a Minitab graphical presentation.

EXAM 3—Chapters 6, 7 and 8 (25 points)

Week of Dec 14

NOTE: This outline is subject to change! Check your e-mail multiple times every day, check our class eCollege website and attend the class regularly.

GRADING

Grades will be based on 3 exams (25 points each) and a 6-part formal class project (total of 25 points). Four of the project parts may be submitted for extra credit. These are shown in red in the course outline above. Project Parts must be completed and submitted on time as scheduled during the course to earn credit. No late work will be accepted. Plan in advance for the exams: there will be no early exams and no make-up exams. An exam that is missed will be considered an F unless I am notified prior to the exam and the excuse is a legitimate medical one or officially approved. Computer issues are not a valid excuse. Regardless of the excuse, if you miss two tests you will automatically fail the class. Again, late assignments and projects will not be accepted. Course grades will be assigned as:

90 – 100 % A

80 – 89 % B

70 – 79 % C

60 – 69 % D

Below 60 % F

Do not fall behind in this class or underestimate the time it will take to do the assignments. You must do the work when it is required. Experience has shown that students have a much better chance of success in this course when all extra credit assignments are completed and submitted on time.

All assignments must be completed in MS Word and submitted to the appropriate assignment Dropbox in the course eCollege website. Each submission should have a filename with your **first initial** followed by your **last name, eco 309** and **assignment number (assign#)**.

EXAMS: Each exam will be online and can be found on our class eCollege website. Each exam is subject to a time limit. For each exam you will need to download data found in an Excel file in Doc Sharing. You will have to complete the selection of your answers to exam problems by the specified submission deadline. Late work will not be accepted.

CLASS PROJECT

The project objective is to derive the best two year quarterly forecast for the sales revenue for the company assigned to you. The historical revenue data from Bloomberg is provided to you in Doc Sharing in excel format. You will be responsible for collecting other data in excel format for variables that you hypothesize have a causal influence on the assigned company revenue. A list of acceptable data sources is provided in Doc Sharing as well. Your hypothesis and the variable data will be included in a project proposal. A description of the project proposal and project general outline can be found in Doc Sharing.

You will need to upload your project part assignments, project proposal and class project to the appropriate Dropbox folder on e-College by midnight of the specified due date. Each submission should include a summary page of what was done and interpretations of the results. Plots and output without interpretive narrative will be considered incomplete and will not be graded. Submit everything in Word format including inserted data files in Excel format, a citation for each variable data series and a label for each of the variables. Do not submit Excel file or worksheet documents or Minitab worksheets in the assignment Dropbox. Again submit only MS Word documents in the Dropbox.

CLASS, LAB/ WORKSHIP AND OFFICE HOURS: I strongly recommend using all options. Do not miss a class lecture session and if you have any questions contact me for further explanations via the email.

TECHNOLOGY REQUIREMENTS

- To fully participate in online courses, you will need to use a current, Flash enabled browser. For PC users, the suggested browser is Internet Explorer 9.0 or 10. For Mac users, the most current update of Firefox is suggested.
- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
 - 512 MB of RAM, 1 GB or more preferred
 - Broadband connection required courses are heavily video intensive
 - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- You must have a:
 - sound card, which is usually integrated into your desktop or laptop computer
 - speakers or headphones.

For ClassLive Pro recorded sessions (if they are available), headphones are suggested for use with recording and playback.

- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. Java can be downloaded at:
<http://www.java.com/en/download/manual.jsp>
- Current anti-virus software must be installed and kept up to date.
- You will need some additional free software for enhanced web browsing. Ensure that you download the free versions of the following software:
 - Adobe Reader
 - Adobe Flash Player
- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.
- For additional information about system requirements, please see:
<https://secure.ecollege.com/tamuc/index.learn?action=technical>

ACCESS AND NAVIGATION

Pearson LearningStudio (eCollege) Access and Log in Information

This course may be facilitated using Pearson LearningStudio, the learning management system used by Texas A&M University-Commerce. To get started with the course, go to: <http://www.tamuc.edu/myleo.aspx>.

You will need your CWID and password to log in to the course. If you do not know your CWID or have forgotten your password, contact Technology Services at 903.468.6000 or helpdesk@tamuc.edu.

It is strongly recommended that you perform a "Browser Test" prior to the start of your course. To launch a browser test, login to Pearson LearningStudio, click on the 'myCourses' tab, and then select the "Browser Test" link under Support Services.

Pearson LearningStudio Student Technical Support

Texas A&M University-Commerce provides students technical support in the use of Pearson LearningStudio.

Technical assistance is available 24 hours a day/ 7 days a week.

If at any time you experience technical problems (e.g., you can't log in to the course, you can't see certain material, etc.) please contact the Pearson LearningStudio Help Desk, available 24 hours a day, seven days a week.

The student help desk may be reached by the following means 24 hours a day, seven days a week.

- **Chat Support:** Click on '*Live Support*' on the tool bar within your course to chat with a Pearson LearningStudio Representative.

- **Phone:** 1-866-656-5511 (Toll Free) to speak with Pearson LearningStudio Technical Support Representative.
- **Email:** helpdesk@online.tamuc.org to initiate a support request with Pearson LearningStudio Technical Support Representative.

Accessing Help from within Your Course: Click on the *'Tech Support'* icon on the upper left side of the screen inside the course. You will then be able to get assistance via online chat, email or by phone by calling the Help Desk number noted below.

Note: Personal computer problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, an Internet cafe, or a bookstore, such as Barnes & Noble, etc.

Policy for Reporting Problems with Pearson LearningStudio

Should students encounter Pearson LearningStudio based problems while submitting assignments/discussions/comments/exams, the following procedure **MUST** be followed?

1. Students must report the problem to the help desk. You may reach the helpdesk at helpdesk@online.tamuc.org or 1-866-656-5511
2. Students **MUST** file their problem with the helpdesk and obtain a helpdesk ticket number
3. Once a helpdesk ticket number is in your possession, students should email me to advise me of the problem and to provide me with the helpdesk ticket number
4. At that time, I will call the helpdesk to confirm your problem and follow up with you

PLEASE NOTE: Your personal computer/access problems are not a legitimate excuse for filing a ticket with the Pearson LearningStudio Help Desk. You are strongly encouraged to check for compatibility of your browser **BEFORE** the course begins and to take the Pearson LearningStudio tutorial offered for students who may require some extra assistance in navigating the Pearson LearningStudio platform. **ONLY** Pearson LearningStudio based problems are legitimate.

Internet Access

An Internet connection is necessary to participate in discussions and assignments, access readings, transfer course work, and receive feedback from your professor. View the requirements as outlined in Technology Requirements above for more information.

myLeo Support

Your myLeo email address is required to send and receive all student correspondence. Please email helpdesk@tamuc.edu or call us at 903-468-6000 with any questions about setting up your myLeo email account. You may also access information at <https://leo.tamuc.edu>.

Learner Support

Go to the following link [One Stop Shop](#)- created to serve you by attempting to provide as many resources as possible in one location.

Go to the following link [Academic Success Center](#)- focused on providing academic resources to help you achieve academic success.

COMMUNICATION AND SUPPORT

Contact Information

Office Hours – One hour before online class by appointment
Telephone: Home Office (903) 365-7190
Fax: 903-886-5601
E-Mail: Stanley.Holmes@tamuc.edu

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Student Considerations and Rules

All students enrolled at the university shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.

The College of Business and Technology at Texas A&M University-Commerce students 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.

Students are required to use leo.tamuc.edu email address for email communication.

The deadline for dropping a class is listed under the academic schedule.

Refer to Student's Guide Book located at:
www.tamuc.edu/studentlife/guidebook.html

PLAGIARISM 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.

STUDENT WORKLOAD University students are expected to dedicate a minimum of *90 clock hours* during the term/semester for a 3SH course.

University Specific Procedures

ADA Statement

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

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See *Code of Student Conduct from Student Guide Handbook*). Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <http://www.albion.com/netiquette/corerules.html>

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

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 in excel and Minitab.	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 presenting the best forecasts in excel format and Minitab graphics.	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.

