College of Business
Eco 309-01W: Economic Forecasting [CRN 50003]
Syllabus (Summer II 2024): 7/8/2022- 8/8/2024

Professor: Dr. Kishor Guru-Gharana
Office: BA 208
Phone 903.886.5703 (off); Fax: 903.886.5702
Preferred Form of Communication: email (24/7 during semester)
Communication Response Time: within 24 hours
Class Hours: Web based class (D2L) + four Zoom Classes (Wednesday 6.30-8 pm)
Email: kishor.guru-gharana@tamuc.edu

Course Description

This course is designed to investigate the techniques of the forecasting process as applied to business, finance, and economics. Experience is gained in using various popular forecast methods, developing a causal variable hypothesis for forecasting, and in collecting and analyzing data.

Course Objectives

1.Students will demonstrate the ability to develop models for forecasting using Excel and other programs like Minitab. This involves the evaluation of four popular alternative forecast methods and deriving the best forecast from among the methods.
2. Students will demonstrate the ability formulate causal hypotheses and to use and forecast appropriate secondary data to forecast business performance.
3. Students will be able to compare different forecasting models based on the data pattern.
4. Students will be able to interpret results generated by a computer software.

Course Requirements

Software Required: Excel with Analysis Tool Pack (installation of Analysis Tool Pack is free).

1. **Click the File tab, click Options, and then click the Add-Ins category.**

If you're using Excel 2007, click the Microsoft Office Button , and then click Excel Options

2. **In the Manage box, select Excel Add-ins and then click Go.**

If you're using Excel for Mac, in the file menu go to Tools > Excel Add-ins.

3. **In the Add-Ins box, check the Analysis ToolPak check box, and then click OK.**

- **If Analysis ToolPak is not listed in the Add-Ins available box, click Browse to locate it.**

- **If you are prompted that the Analysis ToolPak is not currently installed on your computer, click Yes to install it.**

Prerequisites: (Lvl U ECO 231 Min Grade C or Lvl U ECO 2301 Min Grade C) and (Lvl U ECO 232 Min Grade C or Lvl U ECO 2302 Min Grade C) and (Lvl U BA 302 Min Grade C or Lvl U GBUS 302 Min Grade C or Lvl U ECO 302 Min Grade C)

Textbook not required: You can use any available textbook on economic forecasting, but this course is totally based on the text and video lectures uploaded by the Professor.

Minimal Technical skills Needed

High school algebra; using Excel spreadsheet, Excel functions and Excel graphics; using PowerPoint and Data Analysis ToolPak.

Instructional Methods: The professor/instructor will provide live class lecture notes. Also, occasional pre-announced Zoom classes will be conducted during class time and will be announced at least by Friday of the previous week. In the Zoom class I will teach how to use Excel to solve numerical projects related to economic forecasting. After the Zoom class I will upload the recorded video and the text used in D2L content section. Questions can be asked in live classes or Zoom classes or through email. Participation in live and Zoom classes will count when the time comes for extra or bonus points which may be critically important when you are just below a letter grade threshold. Moreover, active class participation invariably improves your understanding.

Student Responsibilities/Tips for Success in the Course
1. Students are expected to:
a. Read and learn from the Lecture notes/ Instructions and videos provided by the Professor.
b. Work the assigned homework problems independently. Submit the homework problems by due date as indicated through D2L or as instructed through email.
d. Pay attention to the regular announcements through D2L and emails.

2. This syllabus is tentative for the semester. It is meant to be a guide. Certain topics may be stressed more or less than indicated in the syllabus depending on class progress, and certain topics may be omitted.

3. Homework problems are assigned and graded about every three to four weeks. Solution to Assignment problems will be provided after grading. You can submit early, but I will start grading only after the deadline.

5. Detailed Instructions with examples for each Chapter will be provided.

6. Feel free to ask questions Zoom class or through email. I am accessible 24/7 even during weekends or holidays.

7. Demeanor: "All students enrolled at the university shall follow tenets of common decency and acceptable behavior conducive to a positive learning environment". See Students Guide Book.

8. Attendance Policy: Zoom Class attendance is not mandatory. However, regular class attendance is highly correlated with students' performance in this class and will be counted at the time of bonus points for active participation at the end of the semester.

Grading

Grade Component   Points
Four Assignments (100*4)   400
Final grade in the course is the average from the four assignments.

Average Range   Grade

90%-100%   A
80%-89%   B
70%-79%   C
60%-69%   D
Below 60%   F

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 myLeo. https://leo.tamuc.edu

Learner Support

The One Stop Shop was created to serve you by providing as many resources as possible in one location. http://www.tamuc.edu/admissions/onestopshop/

The Academic Success Center provides academic resources to help you achieve academic success. http://www.tamuc.edu/campusLife/campusServices/academicSuccessCenter/

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement: I generally respond to email questions within 24 hours. You can email any time (24/7) throughout the semester.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies
Missed examination: Missing Homework Assignment will result in zero score while missing the Final will result in grade "F". There will be no make-up Exam or make-up Assignment.

Syllabus Change Policy
The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct
All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.

http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: Netiquette
http://www.albion.com/netiquette/corerules.html

TAMUC Attendance
For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01.

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

Academic Integrity
Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures: Undergraduate Academic Dishonesty 13.99.99.R0.03

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13stude
nts/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

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 162
Phone (903) 886-5150 or (903) 886-5835   Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Nondiscrimination Notice
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.

Campus Concealed Carry Statement
Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a
concealed handgun in Texas A&M University-Commerce buildings only by persons who have
been issued and are in possession of a Texas License to Carry a Handgun. Qualified law
enforcement officers or those who are otherwise authorized to carry a concealed handgun in the
State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-
Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted
locations. For a list of locations, please refer to the Carrying Concealed Handguns On Campus
document and/or consult your event organizer. Web url:
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34Safet
yOfEmployeesAndStudents/34.06.02.R1.pdf

COURSE OUTLINE / CALENDAR

Topic	Mode	Date/Due date (Class starts on 1/12/2022)	Chapter Goals
Introduction to Forecasting	**D2L uploads + Zoom Lectures+ email attachments**	July 8- 16	Importance and overview of Forecasting and Forecasting Methods
Exploring Data Patterns and Introduction to forecasting techniques	**D2L uploads + Zoom Lectures+ email attachments**	July 8- 16	Data types and patterns; different forecasting techniques; Different Measures of Forecast error
Moving Averages, Smoothing Methods, and Error measurements	**D2L uploads + Zoom Lectures+ email attachments**	July 8- 16	Naïve models; Averaging method; Simple, Moving and Double Moving Averages; First Order differencing
Assignment 1 First order differencing, Moving Average and Double Moving Average	Assignment uploaded in D2L	By 11.59 pm (midnight) on Tuesday, July 16, 2024	
Exponential smoothing Methods	**D2L uploads + Zoom Lectures+ email attachments**	July 16-23	Exponential Smoothing Methods for trend and seasonal variation including Holt's two-parameters' method and Holt-Winters' three parameter methods (Seasonal)- triple smoothing.
Assignment 2 Exponential Smoothing-Holt-Winters two and three parameters)	Assignment uploaded in D2L	By 11.59 pm (midnight) on Tuesday July 23, 2024	

Time Series and their Components	**D2L uploads + Zoom Lectures+ email attachments**	July 24- 30	Decomposition: Trend; Additional Trend Curves; Forecasting Trend; Seasonality; Seasonally Adjusted Data; Cyclical and Irregular Variations
<mark>Assignment 3</mark> <mark>Ratio-to-Moving Average Decomposition Model</mark>	<mark>Assignment Uploaded in D2L</mark>	<mark>By 11.59 pm (midnight) on Tuesday, July 30, 2024</mark>	
Simple Linear Regression	**D2L uploads + Zoom Lectures+ email attachments**	July 30-Aug 6, 2024	Regression Line; Standard Error of the Estimate; Forecasting Y; Decomposition of Variance; Coefficient of Determination; Hypothesis Testing; Analysis of Residuals
Multiple regression with Time Series	**D2L uploads + Zoom Lectures+ email attachments**	July 30-Aug 6, 2024	Several Predictor Variables, Correlation Matrix, Multiple regression Model, Time Series Data and Autocorrelation; Autoregressive models; Heteroscedasticity; Regression with Seasonal data; Cointegrated Time series
<mark>Assignment 4</mark> <mark>Multiple Regression Problem</mark>	<mark>Assignment Uploaded in D2L</mark>	<mark>By 11.59 pm (midnight) on Tuesday Aug 6 2024</mark>	

.