Eco/Fin 533 Applied Financial & Economic Forecasting 81E 21333/20796 Spring 2015

Professor: Stanley Holmes, Ph.D.

Email: Stanley.Holmes@tamu-commerce.edu

Office: BA 132D

Phone: (903) 468-6029 Home Office (903) 365-7190

Fax: (903) 886-5601

Office Hours: From 2:00 until 4:00 P.M. Mondays and Wednesdays_in BA 102. From 12:30 to 4:00 P.M. Central Time on Tuesdays and Thursdays. Other time by appointment.

Text: Forecasting, Times Series, and Regression

Bowerman, O'Connell and Koehler 4th edition 2005,

Brooks/Cole With CD

ISBN: 13:978-0-534-40977-7

Software: You can rent the student version of the software at Minitab website for 6

months at ttp://www.minitab.com/education/semesterrental/default.aspx).

Make sure that you test the software before class begins.

You must have a working copy of Microsoft Excel on your computer as

well.

Hardware: You must have a headset with a microphone to participate in class.

Class This class will meet in room 307 at UCD every Monday from 6:15 P.M.

until 8:55 P.M. Central Time. Try to be on time for the class.

COURSE OUTLINE

Chapter 1 Introduction to Forecasting
Chapter 2 Basic Statistical Concepts
Chapter 3 Simple Linear Regression

✓ Submit the Proposed Independent Variables with Analysis Due 2/18

Chapter 7 Decomposition Methods Chapter 8 Exponential Smoothing

✓ 1st EXAM—Chapters 1,2, 3, 7 and 8 given the week of Mar. 2

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Chapter 9
                       Nonseasonal Box-Jenkins Models
                       Estimation, Diagnostic Checking and Forecasting
Chapter 10
Chapter 11
                       Box-Jenkins Seasonal Modeling
                       Advanced Box-Jenkins Modeling
Chapter 12
\checkmark 2<sup>nd</sup> EXAM—Chapters 9-12 given the week of Mar. 30
Chapter 4
                       Multiple Linear Regression
Chapter 5
                       Model Building and Residual Analysis
Chapter 6
                       Time Series Regression
    ✓ Company Forecast Project - Due Monday, Apr. 27
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✓ Final EXAM comprehensive - Given the week of May 4

NOTE: This outline is subject to change! Regular class attendance is needed to follow up with these changes and the assignments.

GRADES AND ADMINISTRATIVE MATTERS:

Grades will be based on 2 mid-terms (25 points each), project variables proposal (5 points), company forecast project (20 points) and a final (25 points) exam. These are shown in red in the outline. Plan well 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, <u>unless</u> I am notified <u>prior</u> to the exam and the excuse is a legitimate medical one or officially approved. Note that computer issues are not a valid reason for missing an exam. Regardless of the excuse, if you miss two tests you will automatically fail the class. Assignments will be announced in the class; it is your responsibility to keep up with the assignments. Late assignments will not be accepted. Course grades will be assigned as:

90 – 100 % A 80 – 89 % B 70 – 79 % C 60 – 69 % D Below 59 % F

PROPOSED INDEPENDENT VARIABLES FOR THE PROJECT

The proposal will include your data (both your dependent and at least 3 independent variables), data sources (the website source for each variable), data description, simple statistics and relevant plots on all variables, and the correlation matrix. Please read your project proposal description and project outline in Doc Sharing as soon as possible. Complete revenue forecast project for your assigned company will be due no later than April 28. You need to upload the project in the eCollege class project Dropbox where it will be subject to turn-it-in. The final project will include three power point executive level presentation slides and a formal report in MS Word

supporting the assigned company revenue forecast and analysis. See the Project Outline in Doc Sharing for the content requirements for the formal report.

HELPFUL HINTS

Objectives of this course is to introduce the student to both regression and time series techniques and their application to real business situations as well as the use of current software available for forecasting.

Systematic study, rather than cramming, is advisable. Class attendance is strongly recommended. Former students have indicated that the material covered in class is very helpful at the time of the examinations. Reading the assigned materials, working the assigned exercises, taking notes in class, and using the office hours are important learning tools. Specific assignments will be announced orally in the class and it is your responsibility to keep up with all the assignments.

RULES, REGULATIONS AND OTHER STUFF

- ✓ All students enrolled at the university shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.
- ✓ 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, Halladay Student Services Building Room 303 A/D, Phone (903) 886-5150 or (903) 886-5835, Fax (903) 468-8148, StudentDisabilityServices@tamu-commerce.edu

- ✓ 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.
- ✓ <u>PLAGIARISM</u> 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.
- ✓ <u>STUDENT WORKLOAD</u> University graduate students are expected to dedicate a minimum of 90 clock hours during the term/semester for a 3SH course delivered online.
- ✓ <u>NONDISCRIMINATION</u> A&M-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.

Learning Statement for FIN 533				
	Unsatisfactory	Emerging	Proficient	Exemplary
Understanding of time series data and components using various statistical and graphical tools in Excel and Minitab with applications to financial and economic data.	Student exhibits no understanding of the issues being examined.	Student makes serious errors with regard to the significant issues of the question or problem being examined, but at least demonstrates knowledge of some of the major points of the issues.	Student demonstrates understanding of the major points of the issues being examined but does not demonstrate understanding of all the details of the issue.	Student can demonstrate a thorough knowledge of the issue being examined.
Understanding of Regression Analysis and application to both applications to financial and economic data.	Student exhibits no understanding of the issues being examined.	Student makes serious errors with regard to the significant issues of the question or problem being examined, but at least demonstrates knowledge of some of the major points of the issues.	Student demonstrates understanding of the major points of the issues being examined but does not demonstrate understanding of all the details of the issue.	Student can demonstrate a thorough knowledge of the issue being examined.
Understanding and application of different univariate time series models including but not limited to Exponential Smoothing, Decomposition, and ARIMA using financial and economic data.	Student exhibits no understanding of the issues being examined.	Student makes serious errors with regard to the significant issues of the question or problem being examined, but at least demonstrates knowledge of some of the major points of the issues.	Student demonstrates understanding of the major points of the issues being examined but does not demonstrate understanding of all the details of the issue.	Student can demonstrate a thorough knowledge of the issue being examined.
Identification of the best model from alternative models and presenting the forecast in a formal report and executive level PowerPoint presentation.	Student exhibits no understanding of the issues being examined.	Student makes serious errors with regard to the significant issues of the question or problem being examined, but at least demonstrates knowledge of some of the major points of the issues.	Student demonstrates understanding of the major points of the issues being examined but does not demonstrate understanding of all the details of the issue.	Student can demonstrate a thorough knowledge of the issue being examined.