

ECO-533 APPLIED FINANCIAL and ECONOMIC FORECASTING

ONLINE COURSE SYLLABUS

Spring - 2019

Instructor: Dr. Mostafa Malki

Phone:

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Office Hours: By appointment as needed

This is an online course; therefore, **expect most communication to be online** as well. The best way to contact me is by email. Please **ONLY** send emails to [mostafa.malki@tamuc.edu](mailto:mostafa.malki@tamuc.edu). All emails must include ECO - 533 and your section in the subject line. I will respond to emails within a 48 hour time period (not including weekends).

**COURSE DESCRIPTION:** This course an online course. It is designed to investigate the techniques of the forecasting process as applied to business, finance and economics. Experience is gained in using four popular forecast methods, developing a causal variable hypothesis for forecasting, and in collecting and analyzing data. Particular emphasis is given to communicating findings to senior managers in a concise written and verbal format.

**COURSE OBJECTIVES:**

You will explore and describe data, examine sampling distributions, make estimations, test hypotheses, perform simple and multiple regression analysis, and build models working both independently and collaboratively.

These applications will guide the student to:

1. Demonstrate the ability to develop an eight quarter revenue forecast for their assigned company using XLSTAT, ForecastX, or Minitab software. This involves the evaluation of four popular alternative forecast methods and identifying the best forecast from among the methods.
2. Learn how to write concise summaries of each forecast model and results in a manner that senior managers will be able to understand.
3. Demonstrate the ability formulate causal hypotheses and to use appropriate secondary data to forecast business performance.

4. Write and submit a formal class project targeted to senior management that includes the results of each forecast model and all data and citations used in the analysis. An opportunity to conduct a verbal executive level presentation of forecast results will be done in an online Webinar.

### **TEXTBOOK AND OTHER REQUIRED MATERIALS:**

Barry Keating, J. Holton Wilson, John Galt Solutions Inc. **Forecasting and Predictive Analytics with Forecast X™** 7th Edition, McGraw-Hill. ISBN-13: 978-1260085235

### **GRADING POLICY OF ACTIVITIES AND COURSE:**

Evaluation of student performance will be based upon 2 mid-terms (25 points each), company forecast project with presentation (25 points) and a final (25 points) exam.

TWO MID-TERMS (25 POINTS EACH)	50 %
COMPANY FORECAST PROJECT	25 %
FINAL EXAM	25 %

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. There is no comprehensive final exam. Grades for the course will be determined by achieving the following average ranges:

Percentages for course grade level are as follows:

A= 90-100%

B= 80-89%

C = 70-79 %

D= 60-69%

F= 00-59%

**Extra credit work will NOT be assigned so please do not ask.**

### **Tentative Course Schedule:**

**Please Note:** The instructor reserves the right to change this schedule as circumstances may dictate. All changes to this schedule will be announced on the course homepage.

### **Successful Completion of ECO-533 Requires:**

**Academic Honesty:** All students are required to submit an agreement to follow the principles of the highest level of ethical and professional behavior.

## TECHNOLOGY REQUIREMENTS

### Browser support

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

## ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or [helpdesk@tamuc.edu](mailto:helpdesk@tamuc.edu).

**Note:** Personal computer and internet connection 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, Starbucks, a TAMUC campus open computer lab, etc.

## **COMMUNICATION AND SUPPORT**

### **Brightspace Support**

#### **Need Help?**

#### **Student Support**

If you have any questions or are having difficulties with the course material, please contact your Instructor.

### **Technical Support**

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778 or click on the **Live Chat** or click on the words “[click here](#)” to submit an issue via email.



### **System Maintenance**

D2L runs monthly updates during the last week of the month, usually on Wednesday. The system should remain up during this time unless otherwise specified in an announcement. You may experience minimal impacts to performance and/or look and feel of the environment.

### **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](mailto:StudentDisabilityServices@tamuc.edu)

Students are held individually responsible for the information contained in the University catalog. Failure to read and comply with University regulations will not exempt students from whatever penalties they may incur.

- “All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.”
- Students enrolled in on-line courses have the same rights and responsibilities as students in live- taught courses.
- Refer to Student’s Guide Book located at: [www.tamu-commerce.edu/studentlife/guidebook.htm](http://www.tamu-commerce.edu/studentlife/guidebook.htm)

**PROFESSIONAL CONDUCT:** The instructor reserves the right to manage a positive learning environment and thus will not tolerate inappropriate conduct in the course. If I feel that you have not contributed appropriately in class, or that you have complained about assignments and grading policies, your final course grade may be reduced accordingly. Additionally, I expect every student to maintain a professional level with respecting opinions of the instructor, students, and guest speakers. Please note: It is the student’s responsibility to ask the instructor for additional information if the student does not understand the assignments required in this course. In addition, sending emails to other students complaining or inquiring about grades is not appropriate behavior. Understand that this factor is highly subjective and can reduce your overall course grade. In extreme cases, the instructor reserves the right to drop students from the class.

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).  
<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)  
<http://www.albion.com/netiquette/corerules.html>

**ACADEMIC INTEGRITY:** Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating of information or citation, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students.

In this course the need for collaboration is undeniable if you are to excel, even in cases of individual work. There is a fine line in this process. You are encouraged to seek the help and advice of others. However, you must do your own work. My personal policy, which will guide this course, is this: I trust you to behave honestly and ethically in all circumstances. Please ask me if you have questions about what is proper and what is not. 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/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

**All Work Submitted Will Be Verified By Turnitin.Com.**

**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.

**Academic Integrity**

**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](mailto: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/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

### **Tentative Course Schedule**

**Please Note:** The instructor reserves the right to change this schedule as circumstances may dictate. All changes to this schedule will be announced on the course homepage.

<b>Assignment</b>	<b>Topic</b>	<b>Date (Week of)</b>
Chapter 1	Introduction to Business Forecasting and Predictive Analytics	14-Jan

Chapter 2	The Forecast Process, Data Considerations, and Model Selection	21-Jan
Chapter 3	Extrapolation 1. Moving Averages and Exponential Smoothing	28-Jan
Chapter 4	Extrapolation 2. Introduction to Forecasting with Regression Trend Models	4-Feb
<b>Exam 1</b>	<b>Chapters 1 to 4</b>	<b>Open at 8:00am on 9-Feb Closes at 11:59pm on 10-Feb</b>
Chapter 5	Explanatory Models 1. Forecasting with Multiple Regression Causal Models	11-Feb & 18 Feb
Chapter 6	Explanatory Models 2. Time-Series Decomposition	25-Feb & 4-Mar
Chapter 7	Explanatory Models 3. ARIMA (Box-Jenkins) Forecasting Models	11-Mar
Chapter 8	Predictive Analytics: Helping to Make Sense of Big Data	18-Mar
<b>Exam 2</b>	<b>Chapters 5 to 8</b>	<b>Open at 8:00am on 23-Mar Closes at 11:59pm on 24-Mar</b>
Chapter 9	Classification Models: The Most Used Models in Analytics	25-Mar
Chapter 10	Ensemble Models and Clustering	1-Apr & 8-Apr

Chapter 11	Text Mining	15-Apr
Chapter 12	Forecast/Analytics Implementation	22-Apr & 27- Apr
<b>Final Exam</b>	<b>Chapters 10 to 12</b>	<b>Open at 8:00am on 3-May Closes at 11:59pm on 4-May</b>