

**BUSINESS AND ECONOMICS FORECASTING**  
**ECON 3342 – 01I/02I**  
Fall, 2019

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Office Hours: MW 3:00 p.m. – 5:00 p.m. and by appointment  
Lecture Time: TR 3:30 p.m. – 4:45 p.m.  
Lecture Venue: Edinburg, Vackar College of Business and Entrepreneurship 111  
Brownsville, Life & Health Sciences #61 2.312

**Course Description**

This course focus is on the empirical application of econometric techniques to prediction in business and economics. The course starts with topics such as basic regression, model building and specification, and hypothesis testing. More detailed examination of various modern forecasting techniques will follow. Upon completion, the student will know how to work with time series data and build forecasting models trend, seasonal and cyclical components.

**Prerequisites**

ECON 2301, ECON 2302, and MATH 1322 or QUMT 2340.

**Suggested Textbook**

*Elements of Forecasting*, Francis X. Diebold, 4th Edition. South-Western Cengage Learning. ISBN: 0-324-32359-X.

**Required Computer Software**

EViews version 8 or more recent will work for this class. You can obtain EViews University Edition at \$49.95 USD from <http://www.eviews.com/BuyNow/Academic.html>

**Optional Computer Software**

Gretl (Gnu Regression, Econometrics and Time-series Library). This is an open-source (free) software available at: <http://gretl.sourceforge.net/>

### Tentative Lecture Schedule

Topic	Date	Material
1	Aug 27 - 29	Introduction to Forecasting (Ch. 1)
2	Sep 3	Main Statistical Concepts (Ch. 2)
3	Sep 5	Basic Regression (Ch. 2)
4	Sep 10 - 12	Multiple Regression (Ch. 2)
		<b>Assignment 1.</b> Tuesday, September 24.
5	Sep 17 - 19	Six Basic Considerations for Successful Forecasting (Ch. 3)
6	Sep 24	Statistical Graphics for Forecasting (Ch. 4)
7	Sep 26 – Oct 1	Modeling and Forecasting Trend (Ch. 5)
8	Oct 3 - 8	Modeling and Forecasting Seasonality (Ch. 6)
Review		<b>Assignment 2.</b> Tuesday, October 8.
		<b>Exam 1.</b> Thursday, October 10.
9	Oct 15 - 17	Characterizing Cycles (Ch. 7)
10	Oct 22 - 24	Modeling Cycles: MA, AR, and ARMA Models (Ch. 8)
11	Oct 29 - 31	Forecasting Cycles (Ch. 9)
		<b>Assignment 3.</b> Tuesday, November 12.
12	Nov 5 - 7	A Forecasting Model with Trend, Seasonal, and Cyclical Components (Ch. 10)
13	Nov 12 - 14	Forecasting with Regression Models (Ch. 11)
14	Nov 19 - 21	Evaluating and Combining Forecasts (Ch. 12)
Review		<b>Assignment 4.</b> Tuesday, December 3.
		<b>Exam 2.</b> Thursday, December 12. (1:15 p.m. - 3:00 p.m.)

### Grading Structure

There will be two non-cumulative exams; each will count 30% towards your final grade. Additionally, you will have four problem sets of 10% each. No additional credit will be given. The cutoffs for the A-F grading system are given by:

90.00 – 100.0	→	A
80.00 – 89.99	→	B
70.00 – 79.99	→	C
60.00 – 69.99	→	D
Less than 60.00	→	F

### Exams

No notes, books, coats, backpacks, etc. are to be at your desk during the examinations. You can bring a basic calculator, but you may not need it. You must have a valid University excuse in order to take a make-up exam. You need to schedule your make-up exam at the time you first know that you will not be taking the exam.

### **Assignments**

The four problem sets assigned during the semester will have an important component of computer-based exercises. You will be learning EViews in this class, but you are welcome to work with any other statistical software for the computer assignments (e.g. Stata, SAS, Gretl). Late assignments will never be accepted without a valid University excuse. I encourage you to work in groups. Moreover, assignments can be turned either individually or in groups of maximum three students. Make sure to submit proof that you work on the computer exercises (e.g., capture/print the screen). You can submit your assignment via email. If you need help, do not hesitate to ask me during my office hours. You should view the assignments as part of your preparation for the exams.

### **Tips to Succeed in this Class**

- 1) First of all, you should attend class. The organization of the lectures will follow the suggested textbook, so reading it *before* class will make the material easier to understand. After classes you should read your notes and the book again. If anything is unclear, you should read the book again. Don't wait until last minute and leave time to get help if needed.
- 2) I encourage you to come to my office hours if you have question about the material. If you cannot make it to the office hours send me an e-mail with your schedule availability.
- 3) All the material will be posted in the class website. You are encouraged to visit the website frequently as I will post there the assignments, solutions to the assignments, solutions to the exams, and datasets.

### **Important University Dates**

The UTRGV academic calendar can be found at <http://my.utrgv.edu> at the bottom of the screen, prior to login. Some important dates include:

August 26	First day of classes
August 29	Last day to add a course or register for Fall 2019
September 2	Labor Day Holiday – NO classes
November 13	Last day to drop a course; will count toward the 6-drop rule
November 28 - 29	Thanksgiving Holiday – NO classes
December 5	Study Day – NO classes
December 6 - 12	Final Exams
December 13 - 14	Commencement Exercises

### Learning Goals

BBA Learning Goals	This course contributes to the following College of Business and Entrepreneurship learning goals:	How is measured:
Demonstrate foundational knowledge of functional area concepts and theories.	<input checked="" type="checkbox"/>	Assignments
Demonstrate effective business communication skills.	<input checked="" type="checkbox"/>	Exams
Apply sustainable practices (economic, social and ethical, and environmental) to business decision-making.	<input type="checkbox"/>	
Demonstrate an understanding of how globalization, including conditions on the US-Mexico border, shape effective business decision making.	<input checked="" type="checkbox"/>	Assignments
Apply quantitative analytical skills to business decision-making.	<input checked="" type="checkbox"/>	Exams
Demonstrate the ability to critically analyze business issues.	<input checked="" type="checkbox"/>	Exams and Assignments
BA and BBA in Economics Major Learning Objectives	This course contributes to the following Department of Economics and Finance learning objectives:	How is measured:
Written communication skills	<input checked="" type="checkbox"/>	Assignments and Exams
Analytical skills	<input checked="" type="checkbox"/>	Assignments and Exams
Current global awareness	<input checked="" type="checkbox"/>	Exams
Knowledge of Economics	<input checked="" type="checkbox"/>	Assignments and Exams

### Mandatory Course Evaluation

Students are required to complete an ONLINE evaluation of this course, accessed through your UTRGV account (<http://my.utrgv.edu>); you will be contacted through email with further instructions. Students who complete their evaluations will have priority access to their grades. Online evaluations will be available:

Fall 2018 Module 1	Oct. 2 – Oct. 8
Fall 2018 Module 2	Nov. 27 – Dec. 3
Fall 2018 (full semester)	Nov. 14 – Dec. 4

### Students with Disabilities

Students with a documented disability (physical, psychological, learning, or other disability which affects academic performance) who would like to receive academic accommodations should contact **Student Accessibility Services (SAS)** as soon as

possible to schedule an appointment to initiate services. Accommodations can be arranged through SAS at any time, but are not retroactive. Students who suffer a broken bone, severe injury or undergo surgery during the semester are eligible for temporary services.

### **Pregnancy, Pregnancy-related, and Parenting Accommodations**

Title IX of the Education Amendments of 1972 prohibits sex discrimination, which includes discrimination based on pregnancy, marital status, or parental status. Students seeking accommodations related to pregnancy, pregnancy-related condition, or parenting (reasonably immediate postpartum period) are encouraged to contact Student Accessibility Services for additional information and to request accommodations.

### **Student Accessibility Services:**

**Brownsville Campus:** Student Accessibility Services is located in Cortez Hall Room 129 and can be contacted by phone at (956) 882-7374 (Voice) or via email at [ability@utrgv.edu](mailto:ability@utrgv.edu). **Edinburg Campus:** Student Accessibility Services is located in 108 University Center and can be contacted by phone at (956) 665-7005 (Voice), (956) 665-3840 (Fax), or via email at [ability@utrgv.edu](mailto:ability@utrgv.edu).

### **Scholastic Integrity**

As members of a community dedicated to Honesty, Integrity and Respect, students are reminded that those who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and expulsion from the University. Scholastic dishonesty includes but is not limited to: cheating, plagiarism (including self-plagiarism), and collusion; submission for credit of any work or materials that are attributable in whole or in part to another person; taking an examination for another person; any act designed to give unfair advantage to a student; or the attempt to commit such acts. Since scholastic dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced (Board of Regents Rules and Regulations and UTRGV Academic Integrity Guidelines). All scholastic dishonesty incidents will be reported to the Dean of Students.

### **Sexual Harassment, Discrimination and Violence**

In accordance with UT System regulations, your instructor is a “responsible employee” for reporting purposes under Title IX regulations and so must report any instance, occurring during a student’s time in college, of sexual assault, stalking, dating violence, domestic violence, or sexual harassment about which she/he becomes aware during this course through writing, discussion, or personal disclosure. More information can be found at [www.utrgv.edu/equity](http://www.utrgv.edu/equity), including confidential resources available on campus. The faculty and staff of UTRGV actively strive to provide a learning, working, and living environment that promotes personal integrity, civility, and mutual respect in an environment free from sexual misconduct and discrimination.

### **Course Drops**

According to UTRGV policy, students may drop any class without penalty earning a grade of DR until the official drop date. Following that date, students must be assigned a letter grade and can no longer drop the class. Students considering dropping the class should be aware of the “3-peat rule” and the “6-drop” rule so they can recognize how dropped classes may affect their academic success. The 6-drop rule refers to Texas law that dictates that undergraduate students may not drop more than six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six-course drop limit. The 3-peat rule refers to additional fees charged to students who take the same class for the third time.

### **Student Services**

Students who demonstrate financial need have a variety of options when it comes to paying for college costs, such as scholarships, grants, loans and work-study. Students should visit the Students Services Center (U Central) for additional information. U Central is located in BMAIN 1.100 (Brownsville) or ESSBL 1.145 (Edinburg) or can be reached by email ([ucentral@utrgv.edu](mailto:ucentral@utrgv.edu)) or telephone: (888) 882-4026. In addition to financial aid, U Central can assist students with registration and admissions.

Students seeking academic help in their studies can use university resources in addition to an instructor’s office hours. University Resources include the Learning Center, Writing Center, Advising Center and Career Center. The centers provide services such as tutoring, writing help, critical thinking, study skills, degree planning, and student employment. Locations are:

Center Name	Brownsville Campus	Edinburg Campus
Advising Center <a href="mailto:AcademicAdvising@utrgv.edu">AcademicAdvising@utrgv.edu</a>	BMAIN 1.400 (956) 665-7120	ESWKH 101 (956) 665-7120
Career Center <a href="mailto:CareerCenter@utrgv.edu">CareerCenter@utrgv.edu</a>	BCRTZ 129 (956) 882-5627	ESSBL 2.101 (956) 665-2243
Counseling Center <a href="mailto:Counseling@utrgv.edu">Counseling@utrgv.edu</a>	EUCTR 109 (956) 665-2574	BSTUN 2.10 (956) 882-3897
Learning Center <a href="mailto:LearningCenter@utrgv.edu">LearningCenter@utrgv.edu</a>	BMSLC 2.118 (956) 882-8208	ELCTR 100 (956) 665-2585
Writing Center <a href="mailto:WC@utrgv.edu">WC@utrgv.edu</a>	BUBLB 3.206 (956) 882-7065	ESTAC 3.119 (956) 665-2538