

# QMB 3301: Quantitative Methods in Business

Section 001, CRN 23327, Spring 2023

University of Texas at El Paso

Time and Location: Online

Instructor: Feng Liu, Ph.D.

Email: [fliu@utep.edu](mailto:fliu@utep.edu) (Students should contact me using their UTEP emails and putting “QMB 3301\_full name” in the subject line.)

Required access: **Connect** (McGraw Hill learning platform), **Excel**, and stable internet connection.

- All assignments, exams, and other materials are delivered through Blackboard and Connect. Students can launch Connect assignments from Blackboard.

## Course Description

An introduction of regression and forecasting techniques, without the burden of mathematical and theoretical details. Topics include a review of descriptive statistics and statistical inference, as well as new materials on regression analysis and forecasting methods. Students will analyze data and perform statistical analyses mainly on computers using Excel. The main challenge will be to interpret results in a valid and meaningful way.

## Course Goals

The primary goal of this course is to help students develop business analytics skills. After taking this course, students are expected to be able

- to develop interval estimates and to conduct hypothesis tests,
- to build/construct analytical models in various business situations,
- to quantify the underlying relation using regression analysis, and to predict the future outcomes of a variable of interest using different forecasting techniques,
- to interpret statistical results from software output,
- to develop problem-solving, presentation, and writing skills.

At the end of this course, student will be able to extract information and gain insights from a data set.

## Course Assignments and Grades

### 1. Course work

<i>Assignment</i>	<i>Points</i>	<i>Material</i>	<i>Date</i>
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Exam 1	100	Chapters 1, 2, 3	Any time between Feb 12 – Feb 18
Exam 2	100	Chapters 5, 6, 7, 8	Any time between Mar 4 – Mar 10
Exam 3	100	Chapters 9, 10, 11	Any time between Apr 8 – Apr 14
Exam 4	100	Chapters 12, 13, 14	Any time between May 6 – May 10
Chapter Assignments	440 = 40 points × 11	—	Scheduled
Total	840		

For the first week, you will watch some videos which are mostly just orientation and introductory materials:

1. The Connect Orientation videos
2. SmartBook 2.0 Orientation
3. Succeeding in Your Online Course
4. Three prep courses: Math, Statistics, and Excel.

The first three videos will be available for one week. The prep courses will be available all semester. All the videos and prep courses in the first week are worth 0 points.

After the first week, each week there will be Slides, a Smartbook, and an Assignment. The Slides and Smartbooks are resources you can use in addition to the e-book. Each Assignment will be 40 points and will have about 10-20 problems. I will generally give two weeks for you to complete each Assignment. Every question on the Assignments allows for three attempts. On the Assignment due date, all answers will be submitted automatically, regardless of your progress, so make sure you finish the Assignments before the due dates.

Exams will be given after each module, which are 100 points each. See the Exam schedule in the table above. There will be 4 exams in the semester. I strongly urge students to use Assignments as preparation for exams.

## 2. Grading Scale

<i>Letter Grade</i>	<i>Percentages</i>
A	[90, 100]
B	[80, 90)
C	[70, 80)
D	[60, 70)
F	below 60

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- **Grades will be available on Blackboard and Connect**, so students can monitor their status themselves. Any end-of-semester adjustments on final grades will be administered at the instructor's discretion and are extremely unlikely.

### **Textbook and Software (Required)**

1. Essentials of Business Statistics, 3<sup>rd</sup> Edition, By Sanjiv Jaggia and Alison Kelly  
ISBN10: 1266422757 | ISBN13: 9781266422751
2. Students must have a computer device, Excel, and reliable internet connection throughout the semester.

### **Communication**

The best way to reach me is via email. I strongly prefer to communicate through emails rather than Blackboard course messages. Please send emails to [fliu@utep.edu](mailto:fliu@utep.edu) and always put "QMB 3301 \_ full name" in the subject line. I will make every attempt to respond to your message within 24 to 48 hours of receipt. For email etiquette, see <https://www.unr.edu/writing-speaking-center/student-resources/writing-speaking-resources/email-etiquette-for-students>.

### **Academic Integrity and Scholastic Dishonesty**

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures (HOOP). It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, processing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as one's own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso will be reported to the [Office of Student Conduct and Conflict Resolution](#) (OSCCR) for possible disciplinary action. To learn more, please visit [HOOP: Student Conduct and Discipline](#). All students are responsible for knowing and adhering to UTEP's policy on academic honesty.

### **Accommodations Policy**

The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University

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programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an accommodation based on a disability must register with the [UTEP Center for Accommodations and Support Services](#) (CASS). Contact CASS at 915-747-5148 or email them at [cass@utep.edu](mailto:cass@utep.edu), or apply for accommodation online via the [CASS portal](#).

### **Withdrawal and Incomplete Grade Policy**

A student may officially withdraw from this class in accordance with UTEP policy and within the UTEP academic calendar dates. Automatic withdrawals will NOT be made by the instructor. To be withdrawn from the class, students must take the appropriate actions on or before the university deadlines.

The policy of the College of Business Administration is that incomplete grades are to be given only to students who need additional time to complete the specified assignments and are typically only assigned in extreme circumstances with documentation. Incompletes will NOT be given to those students who are not passing the course and wish to retake the course at a later date. It is your responsibility to know what the effect of a withdrawal will have on your academic standing, financial aid, scholarships, etc. International students are encouraged to go to the Office of International Program to discuss any schedule changes.

### **Course Evaluation**

Your constructive assessment of this course plays an indispensable role in shaping education at UTEP. Upon completing the course, please take the time to fill out the online course evaluation.

### **Copyright Statement**

All materials used in this course are protected by copyright law. The course materials are only for the use of students currently enrolled in this course and only for the purpose of this course. They may not be further disseminated.

### **Final Note**

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The contents of the syllabus are tentative and subject to change. Any changes will be made known to the students beforehand and posted to Blackboard course site.

### **Tentative Course Content**

The outline below provides a general plan for this course. Deviations may be necessary.

Week 1 (Jan 16 - Jan 21)

- Introduction materials

Week 2 (Jan 22 – Jan 28)

- reading: Chapter 1 Section 1.1, 1.2, 1.3
- assignment: Chapter 1 Assignment

Week 3 (Jan 29 – Feb 4):

- reading: Chapter 2 Section 2.1, 2.2, 2.3, 2.4
- assignment: Chapter 2 Assignment

Week 4 (Feb 5 – Feb 11)

- reading: Chapter 3 Section 3.1, 3.2, 3.4, 3.5
- assignment: Chapter 3 Assignment

Weeks 5 and 6 (Feb 12 – Feb 18, Feb 19 – Feb 25)

- exam: Exam 1, which must be done between Feb 12<sup>th</sup> and 18<sup>th</sup>.
- reading: Chapter 5 Section 5.1, 5.2; Chapter 6 Section 6.1, 6.2
- assignment: Chapters 5&6 Assignment

Weeks 7 and 8 (Feb 26 – Mar 3, Mar 4 – Mar 10)

- reading: Chapter 7 Section 7.2, 7.3; Chapter 8 Section 8.1, 8.2, 8.3
- assignment: Chapters 7&8 Assignment
- exam: Exam 2, which must be done between Mar 4<sup>th</sup> and 10<sup>th</sup>.

Week 9 (Mar 11 – Mar 17)

- Spring Break. No Assignment!

Week 10 (Mar 18 – Mar 24)

- reading: Chapter 9 Section 9.1, 9.2, 9.3, 9.4
- assignment: Chapter 9 Assignment

Week 11 (Mar 25 – Mar 31)

- reading: Chapter 10 Section 10.1
- assignment: Chapter 10 Assignment

Week 12 (Apr 1 – Apr 7)

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- reading: Chapter 11 Section 11.1, 11.2, 11.3
  - assignment: Chapter 11 Assignment

Weeks 13 and 14 (Apr 8 – Apr 14, Apr 15 – Apr 21)

- exam: Exam 3
- reading: Chapter 12 Section 12.1, 12.2, 12.3, 12.4
- assignment: Chapter 12 Assignment

Week 15 (Apr 22 – Apr 28)

- reading: Chapter 13 Section 13.1, 13.2, 13.3
- assignment: Chapter 13 Assignment

Week 16 (Apr 29 – May 5)

- reading: Chapter 14 Section 1.4.1, 14.2, 14.3, 14.4, 14.5
- assignment: Chapter 14 Assignment

Week 17 (May 6 – May 10)

- exam: Exam 4