



**ECO 302 21E – Business and Economic Statistics  
SPRING 2020**

**Instructor:** Dr. Jared Pickens, CFP®, AFC®

**Classroom:** Collin College (Frisco) U139

**Class time:** Thursdays 1PM – 3:45PM

**Office Location:** BA 102 F and Online via RingCentral Meetings

**Office Hours:** by appointment

**Phone:** (972) 546-0059 (call or text)

**Preferred Form of Communication:** Please send emails through the MyLeo Online message system only. This will let me know which class you are in and will keep the class more organized. Always make sure the prefix of the course is listed example: ECO 302 or ECO302

**Communication Response Time:** Emails will be responded to within 48 hours Monday – Friday.

## **COURSE INFORMATION**

### **Materials – Textbooks, Readings, Supplementary Readings**

#### **Textbook/Materials Required**

**Textbook Required:** A. Lind/W. G. Marchal/S. A. Wathen, Statistical Techniques in Business & Economics – McGraw Hill Irwin, 17e Year: 2018, ISBN: 9781259666360 (978-1-259-66636-0).

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

*Syllabus/schedule subject to change*

## **Course Description**

This course introduces students to descriptive statistics (measures of central tendency and variation and representing data graphically) and statistical inference. Inference will involve sampling techniques, estimation, hypothesis testing and simple regression. Applications emphasize continuous improvement of products and services.

## **Student Learning Outcomes:**

By completing this course, the student will be able to:

- 1) Calculate and apply measures of location and measures of dispersion.
- 2) Apply discrete and continuous probability distributions to various business problems.
- 3) Understand the meaning of null and alternative hypotheses, type I and type II errors and to perform test of hypothesis including Z and t-tests.
- 4) Calculate confidence interval for a population parameter for mean and proportions.
- 5) Compute and interpret the results of Bivariate Regression and Correlation Analysis.
- 6) Interpret regression results generated by a computer software.

## **COURSE REQUIREMENTS**

### **Instructional / Design of Course**

**The class will be held once a week in a face to face environment. Students are required to attend at all times. Students are also required to participate. Students are expected to be read the book prior to class. Pop quizzes/attendance will be taken at random and the average of this score will count for 10% of the final grade. You must be present in this course to pass.**

Students will be assigned a quiz assignment each week to help master the week's content. Quizzes are required to be completed by Sunday at 11:59 PM of the week assigned. **We will work on the quiz during part of class so students need to always bring digital or print outs of the quizzes to class.**

### **Student Responsibilities**

Attendance is required at all times. Students are expected to watch all online lectures prior to the class. Due to the difficulty of the material covered in this class, it is highly important that students attend all lectures. Students should be ready each class period for a pop quiz or attendance grade.

**The professor will not repeat questions that can be found on the syllabus.** Furthermore, the professor will not answer questions regarding the class or content that have been addressed in lectures and/or e-mails to the course.

**Students are expected to be read the book prior to attending class.**

## GRADING

Absolutely no late work will be accepted. Students that miss an exam will receive a zero. It is possible that curves will be given on exams. It is possible that students will receive extra credit, but it is up to the professor.

### Exams

There will be three exams including the final. The final is comprehensive and will cover all of the course material covered during the semester. Students are responsible for information from live/recorded lectures, required readings, and any guest speakers. **There are no makeup exams.** The professor will allow the final exam score to replace ONE of a student's previous exam score if the final exam score is higher.

### Weekly Quizzes

In order to successfully master the student learning objectives in this course, students will be required to complete Weekly quizzes throughout the semester. Quizzes are due on Sundays at 11:59PM of the week assigned and are completed in D2L. The quizzes are not busy work, but rather an opportunity to practice what the student has learned.

### Lecture Attendance / Pop Quizzes

Attendance is very important to be successful in the course. Attending the course regularly will help a student feel more engaged and increase the probability that they meet the course learning objectives.

Attendance grades and pop quizzes will be given randomly. The material for the pop quizzes are typically from the prior class days; however, the reading material may be included in the quiz. In regards to attendance grades, if a student is present then he/she gets a 100 and if they miss a class and attendance is taken then a zero is received. Pop quizzes will be graded. The average of the attendance and pop quizzes will be used towards the 10% of a student's average.

The professor will drop ONE of the lowest attendance or pop quiz grades.

**Please note that if the professor is at a conference or can't attend the lecture – a recorded lecture will be provided and put online to cover the content missed.**

**This policy will be strictly enforced.**

## Final Grades

Final grades in this course will be based on the following scale:

Exam 1	25%	A = 90%-100%
Exam 2	25%	B = 80%-89%
Exam 3	25%	C = 70%-79%
Quizzes	15%	D = 60%-69%
<u>Attendance</u>	<u>10%</u>	F = 59% or Below
Total	100%	

## IMPORTANT DATES AND INFORMATION

Please see D2L for more information

## COURSE OUTLINE / CALENDAR

See D2L Calender

## ACADEMIC DISHONESTY

The Department of Economics and Finance is committed to maintaining the integrity and respectability of degrees conferred and course credit earned through our department. Academic dishonesty restricts the understanding of subject material by the perpetrator, distracts and discourages other class members, and reduces the value of the economic signal of degrees conferred through Texas A&M University - Commerce. Whether courses are online, face-to-face, or hybrid combinations; the faculty, staff, and student members of the Department of Economics and Finance are committed to protecting the integrity of our courses, regardless of the delivery method.

All academic work must meet the standards contained in A Culture of Honesty: Policies and Procedures on Academic Honest. Students are responsible for informing themselves about those standards and for observing the University Honor Code. Plagiarism occurs when a student submits work that is not his or her own. This includes copying from printed materials, websites, or from other people. All students are expected to turn in work that has been completed individually, unless otherwise informed by the instructor. Any assignment containing plagiarized material will automatically be graded as zero.

Please read the following items for more specific information regarding academic dishonesty.

Department of Economics and Finance Policies

[http://www.tamuc.edu/academics/colleges/business/departments/economic\\_sfinance/academic\\_integrity\\_policy.aspx](http://www.tamuc.edu/academics/colleges/business/departments/economic_sfinance/academic_integrity_policy.aspx)

TAMUC – Undergraduate Policies

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

## 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.

### Desktop Support

Browser	Supported Browser Version (s)	Maintenance Browser Version (s)
Microsoft ® Edge	Latest	N/A
Microsoft ® Internet	N/A	11

<b>Browser</b>	<b>Supported Browser Version (s)</b>	<b>Maintenance Browser Version (s)</b>
Explorer®		
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A
Apple® Safari®	Latest	N/A

### Tablet and Mobile Support

<b>Device</b>	<b>Operating System</b>	<b>Browser</b>	<b>Supported Browser Version(s)</b>
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	<p>The current major version of iOS (the latest minor or <b>point</b> release of that major version) and the previous major version of iOS (the latest minor or <b>point</b> release of that major version). For example, as of June 7, 2017, D2L supports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version.</p> <p>Chrome: Latest version for the iOS browser.</p>



<b>Device</b>	<b>Operating System</b>	<b>Browser</b>	<b>Supported Browser Version(s)</b>
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
  - 512 MB of RAM, 1 GB or more preferred
  - Broadband connection required courses are heavily video intensive
  - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- You must have a:
  - Sound card, which is usually integrated into your desktop or laptop computer
  - Speakers or headphones.
  - \*For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: [JAVA web site](http://www.java.com/en/download/manual.jsp)  
<http://www.java.com/en/download/manual.jsp>
- Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.  
 Pop-ups are allowed.  
 JavaScript is enabled.  
 Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
  - [Adobe Reader](https://get.adobe.com/reader/) <https://get.adobe.com/reader/>
  - [Adobe Flash Player](https://get.adobe.com/flashplayer/) (version 17 or later)  
<https://get.adobe.com/flashplayer/>

- [Adobe Shockwave Player](https://get.adobe.com/shockwave/) <https://get.adobe.com/shockwave/>
- [Apple Quick Time](http://www.apple.com/quicktime/download/) <http://www.apple.com/quicktime/download/>
- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

## 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**

Please note that on the 4th Sunday of each month there will be System Maintenance which means the system will not be available 12 pm-6 am CST.

## **Interaction with Instructor Statement**

## **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 132  
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/)  
<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.

**Statement on Campus Concealed Carry**

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 34.06.02R1, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to (<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>) and or consult your event organizer). 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.

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