

SYLLABUS

ECON 2843: Elements of Statistics

INSTRUCTOR INFORMATION

Instructor: Collin DeVore

Email: collindevore@ou.edu

Communications: Communications will be accomplished primarily through Canvas and by email. All pertinent student emails will be answered within 24- 48 hours of their arrival, unless prior notice of a delayed response is provided. For a quicker response please put the course prefix and number in the subject line (e.g., CAS 1234: Question about the Syllabus).

Email Account, Canvas and Connect: Students are expected to check their OU email accounts and the course site on Canvas daily for updates from the instructor. You will need to be sure to do the following:

- Set up your Connect account to access your homework and exams.
- Set up your default email address so you can reply to email directly from Canvas.
- Set your profile photo as well and make sure to set up your Canvas notifications.
- Update the Display Name in your Canvas profile so we know what you prefer to be called!
- It is also recommended that you download and install the Canvas Mobile app for your device for on-the-go access to course materials, schedule, and communications.
- **Use this website to link to the course:**

Office hours:

Tuesdays and Thursdays 1:00 p.m. - 2:00 p.m. and by appointment.

The zoom link for these meetings is:

Note: All office hour meetings will be done on Zoom. Send me an email if you would like to schedule a meeting outside of this time, so I can share with you the link and passcode for the Zoom meeting.

COURSE DESCRIPTION

Course Description:

This is an introductory statistics course, which surveys basic statistical techniques with particular emphasis on business and economic applications. The learning objective of this course is to improve students' analytical skills in understanding and employing descriptive and inferential statistics. We begin this course by learning how to describe the data in use. Then, we focus on applied probability theory, which enables us to understand the essence of statistical inference. For the rest of the course, we explore multiple inference tools such as confidence interval estimation, hypothesis testing, and analysis of variance. These tools help us make use of sample data to reach conclusions about population parameters.

Course Delivery Method:

This course is delivered completely online. Assignments and activities will be listed on and will be facilitated via the Connect.

The Canvas website has a number of helpful resources. **The Canvas website also links directly to Connect, providing easy access to your online homework**, practice exams, and e-book. These collectively provide a great platform to engage with questions that are very similar to exam questions. A document giving you a step-by-step set of instructions on how to link up directly with Connect is also available on the Canvas Website.

Learning Outcomes:

Upon completion of this course, my goal is that you are able to:

1. Understand and explain basic statistical concepts and basic elements of real-world situations and to use the knowledge.
2. Apply your understanding of statistics and economics to current events, as well as being able to distinguish between correct and incorrect economic logic.
3. Take away a long-lasting interest in economics, statistics and the economy.

REQUIRED MATERIALS AND SOFTWARE

Required Materials:

The required text for the course is Jaggia and Kelly Business Statistics, ISBN-10: 1260716309 and ISBN-13: 978-1260716306

To succeed in this class, it is critical that you spend time learning economics and statistics both inside and outside of the classroom. You need to purchase the e-book or hard copy version **with Connect access**. You can do this through the OU bookstore, the Connect website, or **the course website, which has a direct link to the purchase**. If you have a problem using the Connect website, you should contact them at <http://mhhe.com/support> or call 1 - 800 - 331 - 5094 rather than contacting me.

Required Software:

You will need to have reliable daily internet access on your computer to access course documents and submit your work. (*Please see the CAS Student Online Orientation if you need assistance with Canvas.*)

GRADING POLICY

Points Breakdown:

ASSIGNMENTS	Percent of overall course grade
Discussions	10%
BookSmart homework and Quizzes	15%
Case studies	15%
Exams (1-3)	60%
Article Discussion Extra credit	5 extra points on each exam

Grading Scale:

A = 90% - 100% (900-1000 points)

B = 80% -89% (800-899 points)

C = 70% - 79% (700-799 points)

D = 60% -69% (600-699 points)

F = Below 60% (below 600 points)

Discussions

Each week, we will have a few discussion question for participation credit. You are expected to answer them in a scholarly manner, referring to outside resources as you need

them. After you are finished, you are expected to respond to two other students' posts. These discussions are designed to encourage you to interact with your fellow classmates and to practice thinking critically about statistics. Please be respectful of others and keep all discussions appropriate.

Homework on Connect:

You will have online LearnSmart assignments. They come from the "**BookSmart**" **application** and are designed to help you learn the material in a manner tailored to your own style and strengths. **The homework is worth 15% of your final grade. You should score very well – that is my goal and it should be your goal.** The LearnSmart homework is an adaptive study plan where students take activities on their own while the built-in diagnostic tool gauges their strengths and weaknesses and develops individualized learning plans and goals. Unfamiliarity with the concepts will undercut the 60% of your grade coming from exams.

DO NOT wait until the last few hours of the assignment window!! Internet connection can be lost. You may get emergency phone calls that need reactions. Life happens! Absolutely NO LATE HOMEWORK will earn points. It is an on-line system set up to award points only for what is completed prior to midnight of the due date. It's automatic; I do not interact with the system timeline once it is set up initially. You are still able to complete past HW assignments for practice, but they do not generate points.

All assignment can be accessed through your McGraw-Hill account

Case Studies:

You will have case studies that will be completed through the Connect platform. These are assignments that we will use Excel to use real world data to apply what we have learned in class to real world examples. **They are worth 15% of your overall course grade.**

Exams:

You will have Exam 1, Exam 2, and Exam 3. They are given online through your McGraw-Hill Connect account and strictly timed. All exams are multiple choice questions and graphical-based questions. Each exam only contains material that we covered in that section, so they are not cumulative. **Exams account for 60% of your overall course grade.**

You may take the exams at any point before their due dates. They are timed and you only have 1 attempt. Make sure you have properly prepared for each test before opening them as the timer for the test will start once you have clicked on the exam tab. Thus, **do not click on the exam tab until you are ready to take the test.** I will not reopen an exam for any

excuse. If you accidentally enter the exam, you may take the optional final exam at the end of the course.

Optional Final Exam:

There will be an optional final exam that is given on the final exam day along with exam 3. The optional final exam is 100% optional and will cover material from exam 1 and 2. If you take the optional final and score higher on it than you did on either exam 1 or 2, then it will replace one of them. If you take the optional final exam and score lower than you did on either of the first 2 exams it will not count against you and not be added to the gradebook.

Missed Exams:

If you miss an exam or you fail to take the exam in the allotted time window this is on you. Remember the exams are all online and it is up to the student to make sure they have good internet connection. If you fear you might not have the resources needed to take the exam you can take it at the University Library. The only exceptions for missing a test are health (with correct documentation) or university events that require you to miss class. If you are missing a test date you need to let me know BEFORE the exam day so we can work out a plan. If you do not, then you will have to take a 0 and take the optional final.

Extra Credits:

To get extra points in each exam, you must respond to a question prompt that I give you each Sunday. The prompts will ask you questions about an article I give you. Your responses in these extra credit assignments must be at least a page in length, double-spaced, in 12-point font. You must email me with your response before the end of the following Friday.

Grade Calculation:

To be fair to all students, NO GRADES WILL BE ADJUSTED on the basis of being “close”.

ASSIGNMENTS OVERVIEW

Course Assignments (see Course Schedule):

Date	Chapters to read	Homework	Due
December, 18	Introduction and class expectation Chapter 1 – Data and Data Preparation	Chapter 1 LearnSmart	
December, 19	Chapter 2-Tabular and Graphical Methods	Chapter 2 LearnSmart	Chapter 1 Sample Test questions Introduce Yourself Discussion
December, 20	Chapter 3-Numerical Descriptive Measures	Chapter 3 LearnSmart	Chapter 2 Sample Test questions Relative Frequency Case Study Assignment
December, 21	Chapter 4- Introduction to Probability	Chapter 4 LearnSmart	Chapter 3 Sample Test Questions LearnSmart: Chapter 1 to chapter 4 Probability Case Study

Date	Chapters to read	Homework	Due
December, 22			<p>Test 1- Chapters 1-4</p> <p>“You must take the exam any time before midnight on Friday”</p> <p>Email me your extra credit response by midnight (worth 5 points)</p> <p>Application 1 Discussion</p>
December, 23-25			<p>Enjoy the holidays!</p> <p>Try to get ahead on upcoming chapters.</p>
December, 26	Chapter 6- Continuous Probability Distributions	Chapter 6 LearnSmart	Application 2 Discussion
December, 27	Chapter 6 Continuous Probability Distributions Chapter 7-Sampling and Sampling Distributions	Chapter 6 LearnSmart Chapter 7 LearnSmart	Chapter 6 Excel Homework
December, 28	Chapter 7-Sampling and Sampling Distributions	Chapter 7 LearnSmart	Chapter 7 Sample Test Questions

Date	Chapters to read	Homework	Due
December 29	Chapter 8-Interval Estimation	Chapter 8 LearnSmart	Application 3 Discussion Email me your extra credit responses by midnight (worth 5 points)
January, 2	Chapter 8-Interval Estimation	Chapter 8 LearnSmart	Application 4 Discussion Chapter 8 Sample Test Questions
January, 3	Chapter 9- Hypothesis Testing	Chapter 9 LearnSmart	Confidence Interval Case Study
January, 4	Chapter 9- Hypothesis Testing	Chapter 9 LearnSmart	LearnSmart: Chapter 6 to Chapter 9 Chapter 9 Sample Test Questions
January, 5			Application 5 Discussion Test 2- Chapters 6-9 “You must take the exam any time before midnight on this day”

Date	Chapters to read	Homework	Due
January, 8	Chapter 13-Analysis of Variance	Chapter 13 LearnSmart	
January, 9	Chapter 13-Analysis of Variance	Chapter 13 LearnSmart	Application 6 Discussion Hypothesis Testing Case Study
January, 10	Chapter 14-Regression Analysis	Chapter 14 LearnSmart	Application 7 Discussion Application 8 Discussion (Bonus)
January, 11	Chapter 14-Regression Analysis	Chapter 14 LearnSmart	Chapter 14 Sample Test Questions LearnSmart: Chapters 13-14 Email me your extra credit response by midnight (worth 5 points)
January, 12			Test 3- Chapters 13-14 (Optional final) “You may take these exams any time before midnight on this day”

COURSE & UNIVERSITY POLICIES

[] Late Work: Except in cases of documented serious illness or documented emergency no late work will be accepted. Technical difficulties do not qualify as an emergency unless the problem is severe, prolonged, and on the server end (the problem is with Canvas). In such cases, the due date will be modified and a new due date specified. Expect technical difficulties on your own end and make arrangements for a secondary location from which to post and/or an alternative Internet Service Provider.

[] Posting Difficulties: Files which do not post correctly in the assignments area or responses which do not correctly post on the discussion board will not be accepted for a grade. If your file does not post (you are timed out, for example), becomes corrupted, contains a virus, or if your response is blank/partial, you should re-post prior to the deadline so that you may receive a grade. Always check to see that your response or file has correctly posted before you exit Canvas. Be sure to post in advance so that you have enough time to correct for any posting difficulties.

[] Academic Integrity: Cheating is strictly prohibited at the University of Oklahoma, because it devalues the degree you are working hard to get. As a member of the OU community it is your responsibility to protect your educational investment by knowing and following the rules. Absolutely no incidences of academic misconduct will be tolerated in this course. See the Academic Integrity website for more information.

[] Special Accommodations: Any student in this course who has a disability that may prevent the full demonstration of his or her abilities should contact me personally as soon as possible so we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunities. Students with disabilities must be registered with the Disability Resource Center prior to receiving accommodations in this course.

Students requiring academic accommodation should contact the Disability Resource Center, located in the University Community Center, 730 College Ave., for assistance at (405) 325-3852 or TDD: (405) 325-4173. For more information please see the Disability Resource Center website <http://www.ou.edu/drc/home.html>.

[] Religious Holidays: It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required class work that may fall on religious holidays.

Since online courses allow students to complete course work around their unique schedules, and because you are given assignments well in advance of their due dates, most religious holidays should not conflict with the class schedule for this course. However, if you do have plans to observe a religious holiday, please notify your instructor as soon as possible in order to make appropriate arrangements for class work or rescheduling of assignments.

[] Adjustments for Pregnancy/Childbirth Related Issues: Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact me as soon as possible to discuss. Generally, modifications will be made where medically necessary and similar in scope to accommodations based on temporary disability. Please see www.ou.edu/content/eoo/faqs/pregnancy-faqs.html for commonly asked questions.

[] Title IX Resources: For any concerns regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including advocates on-call 24/7, counseling services, mutual no contact orders, scheduling adjustments and disciplinary sanctions against the perpetrator. Please contact the Sexual Misconduct Office 405-325-2215 (8-5, M-F) or OU Advocates 405-615-0013 (24/7) to learn more or to report an incident.

[] Incompletes: The OU College of Arts and Sciences advises its faculty to be very strict about the conditions under which a student is allowed to take an incomplete in a regularly scheduled, letter-graded course. A grade of Incomplete (I) will be given only for a justifiable reason (due to unavoidable circumstances, not lack of planning on the student's part) and only if the student is passing the course. It is the responsibility of the student to request a grade of "I" and to meet with the instructor as early as possible to determine requirements for completing the course. Any incomplete granted must be removed by the deadline specified by the instructor. The time limit set for removal of an incomplete will take into account the circumstances of the situation but may not exceed one calendar year.

[] Final Exam Preparation Period: Pre-finals week will be defined as the seven calendar days before the first day of finals. Faculty may cover new course material throughout this week. For specific provisions of the policy please refer to OU's Final Exam Preparation Period policy (<https://apps.hr.ou.edu/FacultyHandbook#4.10>).

COURSE COPYRIGHT

Sessions and lectures of this course may be recorded or live-streamed. These recordings are the intellectual property of the individual faculty member and may not be shared or

reproduced without the explicit, written consent of the faculty member. In addition, privacy rights of others such as students, guest lecturers, and providers of copyrighted material displayed in the recording may be of concern. Students may not share any course recordings with individuals not enrolled in the class or upload them to any other online environment.

LAND ACKNOWLEDGEMENT STATEMENT

Provided by OU's Tribal Liaison office:

Long before the University of Oklahoma was established, the land on which the University now resides was the traditional home of the “Hasinais” Caddo Nation and “Kirikir?i:s” Wichita & Affiliated Tribes.

We acknowledge this territory once also served as a hunting ground, trade exchange point, and migration route for the Apache, Comanche, Kiowa and Osage nations. Today, 39 tribal nations dwell in the state of Oklahoma as a result of settler and colonial policies that were designed to assimilate Native people. The University of Oklahoma recognizes the historical connection our university has with its indigenous community. We acknowledge, honor and respect the diverse Indigenous peoples connected to this land. We fully recognize, support and advocate for the sovereign rights of all of Oklahoma’s 39 tribal nations. This acknowledgement is aligned with our university’s core value of creating a diverse and inclusive community. It is an institutional responsibility to recognize and acknowledge the people, culture and history that make up our entire OU Community.

UNIVERSITY RESOURCES

Below is a list of resources OU provides to help you succeed in your studies. If you are not familiar with any of these services, make sure to click each link below so you will know what is available to you.

Library: OU Libraries

Writing Center: OU Writing Center

Technical Assistance: OU IT Service Desk