

ECON 2843, Section 301: Elements of Statistics

Instructor: Kasra Khademorezaian
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Office Location: Cate Center I, Room 235
Office Hours: M/W 12:00 – 1:00 PM

Classroom information:

Class Time: M-F 1:00-3:15 PM

Class Meeting Room:

Cate 1, room 174

link: <https://oklahoma.zoom.us/j/93014590740?pwd=OFAyeEoyTDJMYjdQZUh2NG9rb2JLUT09>

Meeting ID: 930 1459 0740

Passcode: 18776078

Calendar:

Please download and import the following iCalendar (.ics) files to your calendar system.

https://oklahoma.zoom.us/meeting/tJctdu2tpzstHtSAfMZOXgWVhdyvaj8nR0q2/ics?icsToken=98tyKuCrriouH92Vtx2HRowqAoj4LO_xmGJagrduvRnIOQ9LZTTAPuZbJLN1SNbi

Course Website:

All course materials (PowerPoint slides, practice problem sets, practice multiple choice questions, answer keys, etc.) will be posted on the Canvas.

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 the descriptive and inferential statistics. We begin this course by learning how to describe the data in use. Then, we focus on probability theory, which enables us to understand the essence of statistical inference. And for the rest of the course, we explore multiple inference tools such as confidence interval estimation, hypothesis testing, and the analysis of variance. These tools help us make use of sample data to reach conclusions about population parameters.

Course Expectations & Objectives:

Upon completion of this course, you should be able to:

1. Understand and explain basic statistical concepts and basic elements of in real world situations 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.

Books and Materials:

Basic Business Statistics (14th ed.) by Mark Berenson, David Levine, Kathryn Szabat, and David Stephan (ISBN: 9780134684994)

I share the slides and other materials on Canvas. You can buy the book through various outlets, but it is not mandatory.

Office Hours:

Office hours are W/F 12:00 - 1:00 PM. I am also available by appointment.

Course Components:

Practice Problem Sets: Problem sets will be available for students and students are expected to use them as a tool to prepare for in-class examinations. *These assignments are not collected or graded.* However, in-class exam questions will follow these questions closely.

Exams: We will have 3 midterm exams. Each will count for 20% of your final grade. Exams will not be able to be made up, so I expect all students to be present. In cases of extreme medical/personal emergencies, and with proper documentation and approval, I reserve the right to use the final exam grade to substitute for a missed exam.

Final Exam: The final exam will be held on Thursday August 4th, from 1:00-3:00 PM. The final exam is cumulative and is worth 30% of your overall grade. However, most of the exam (and all the longer analytical questions) will test the material covered in the last section of the course.

Quizzes:

Depending on the lecture topic and timing, there are going to be sessions with in-class quiz. There are also going to be sessions with no quizzes or sessions with more than one quiz. It depends on the topic and the timing of the lecture.

Class Participation/Attendance: You are expected to positively contribute to the learning environment. While this is a summer course and missing one or two days means missing 1-3 entire chapters, I will take attendance daily. When it comes to final letter grade calculation, your attendance constructs 10% of your grade. If you have official University activities or serious medical emergencies, just provide me with documentation and you will receive credit for those missed days.

Final Grade Calculation:

Class Participation, **10%**

Exams 1-3, 20% each, **60%** total

Final Exam, **30%**

Letter grades: A: 90.0-100 B: 80.0-89.99 C: 70.0-79.99 D: 60.0-69.99 F: less than 60

Classroom Setting:

Please be on time for class. Feel free to ask questions – discussion is critical to fostering the best learning environments. The material is best mastered when students prepare before class by reviewing the materials, we are covering that day.

Students with Disabilities:

Students seeking testing accommodation should register with the Office of Disability Services (ODS). I am happy to accommodate any needs related to the testing environment.

Honor Code Statement:

Academic dishonesty will not be tolerated. Students are assumed to be familiar with the OU honor code. **However, students are encouraged to *work & study together* on practice material and to prepare for exams. Learning from one another is a fantastic way to approach mastering the course material.**

Disclaimer

I reserve the right to make changes to this syllabus during the semester. Any changes will be announced in class.

Tentative Schedule of Class Meetings/Topics:

Week 1: Introduction, Data Organization, Descriptive Measures

- Monday- Syllabus & Course Introduction, Chapters 1.
- Tuesday- Chapters 1 & 2
- Wednesday- Chapter 2 & 3
- Thursday- Chapters 3 & Review
- Friday- Exam I

Section I Exam (Chapters 1-3) – Friday, July 15th

Week 2: Probability, Probability Distributions

- Monday: Review and Chapter 5
- Tuesday: Chapters 5 & 6
- Wednesday: Chapter 6-7
- Thursday: Chapter 7 & Review
- Friday: Exam II

Section II Exam (Chapters 5-7) – Friday, July 22nd

Week 3: Sampling Distributions, Inference, Confidence Interval Estimations

- Monday: Review and Chapter 8
- Tuesday: Chapters 8
- Wednesday: Chapter 9
- Thursday: Chapter 9
- Friday: Exam II

Section III Exam (Ch. 8-9) – Friday, July 2st

Week 4: Hypothesis Testing, The Analysis of Variance

- Monday: Review and Chapter 10.
- Tuesday: Chapter 10 & 11
- Wednesday: Chapter 11 & Review
- Thursday: **Final Exam (Cumulative)**

Final Exam (Cumulative) -Thursday August 4th