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.

Prerequisite
A grade of C or better in Mathematics 1503, 1743, or 1823

The Required E-textbook
Basic Business Statistics (13th ed.) by Mark Berenson, David Levine, and Kathryn Szabat
ISBN: 9780321921468

Note: You must purchase an access code to MyStatLab, which is an online platform that accompanies the required e-textbook. Your homework will be completed on MyStatLab.

• How to purchase the required e-textbook? You have two options: 1.) you may purchase this through the OU Bookstore for about $125; or 2.) you may purchase this through MyStatLab platform for about $100. As long as you have access to the required e-textbook AND MyStatLab platform, I do not care which option you choose. Make your choice given your budget.
How to use MyStatLab? At the end of this syllabus, you find a detailed instruction on how to add this course to your MyStatLab account. You will then be asked to do some assignments that help you get started. It is extremely easy to work with this online platform.

MyStatLab works the best when you use Google Chrome web browser.¹

Course Software
The textbook in use provides detailed instructions on how to use Excel and Minitab to organize data, report summary statistics, and draw inference. Since OU students have free access to M.S. Office 365, I will be using Excel for this course.

Course Websites
The main course website is Canvas (http://canvas.ou.edu). From there, you will be directed to MyStatLab for the assignments. You will also be directed to OU-Create for lecture materials such as lecture presentations, examples, and previous exams.

Assessment
Students’ performance will be assessed based on three exams (each with 20% weight), course assignments (20% weight), and class participation (20% weight):

• The Exams Grade:
  There are two midterm exams and a final exam. The questions in the exams are multiple choice, and they test your general understanding of the subject matter rather than your computational skills. Though the concepts are closely related to each other, the exams are not cumulative. When it comes to final letter grade calculation, each exam has 20% weight. Your midterm exams are, therefore, as important as your final.
  If you miss one of the midterm exams, you will be asked to take a comprehensive make-up, which covers the materials that are covered in both of the midterm exams. Others have also the right to take the comprehensive exam if they wish. If their grade in the comprehensive exam is greater than any of their midterms, I take the better grade into account. This exam is scheduled right after the final exam. That said, there is no make-up if you miss the final. You will receive a zero for that exam.

• The Assignments Grade:
  For each chapter, there is a homework set up on MyStatLab and must be done on that platform. These assignments have pre-determined due dates. To assess your performance, the average homework grade for each chapter will be computed. At the end of the semester, the average of your grades for all the chapters that are covered in this course will be taken into account. Keep in mind that all the chapters have the same weight. Eventually, the average homework grade contributes to 20% of your final letter grade calculation.
  It should be noted that there is no make-up, unless you miss an assignment due to unavoidable exceptional circumstances. In those circumstances, you are asked

¹Google Chrome web browser can be downloaded for free at: http://www.google.com/chrome
to contact one of my teaching assistants 24 hours before the deadline. The due
date will then be extended accordingly. Otherwise, you receive zero for your missed
work.

- The Class Participation Grade:
  This is an on-campus course, and students are expected to attend lectures. I will
take attendance. There are also a number of in-class activities. Class participation
is worth 20% of your final grade. If you miss more than six sessions but less than
ten, you will receive only 10%. If you miss ten sessions or more, you will receive
nothing. If you miss a lecture due to well-justified reasons (e.g., health, job, army,
etc.), you will be asked to provide my teaching assistant with a note, justifying your
absence.

The sum of your exams and assignments grades will determine your final letter grade on
a scale where 90 or above is an A and less than 60 is an F. Tests will not be curved, needs
based appeals will not be entertained, and grades will be determined in strict accordance
with the above policy.

Some Tips
In what follows, I share some tips on how to succeed in this course:

- Take part in classes. The key concepts are introduced in the lectures. You also get
to see the application of those concepts in a number of in-class activities. We also
discuss how those new concepts relate to what we have already learned. This is the
most efficient way to learn the concepts of interest and to see their applications.
Also, you should keep in mind that 20% of your final grade is based on your class
participation.

- Take personal notes during the lectures. I share the materials that I use in my
lectures. However, it is very useful if you also keep some personal notes. Keep your
notes organized.

- Read the textbook. The textbook that we use for this course is quite innovative. It
describes the concepts thoroughly while providing lots of examples and real life
applications. It is a joy to read.\(^2\) The textbook in use also includes detailed
instructions on how to use Excel for the topics that are discussed in each chapter.
Follow those instructions carefully. Take personal notes once you read the textbook.
Organize your notes.

- You are supposed to do the assignments after the materials are covered in the
lectures. To do so, review your personal notes from the lectures and the textbook.
Then, get started with the homework. Also, there are multiple tools in MyStatLab
platform that help you solve the homework. Make use of them.\(^3\) It is again quite
useful if you keep some personal notes, working on the homework. Keep your notes
organized. Also, you should keep in mind that 20% of your final grade is based on
your assignments.

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\(^2\) For more information, refer to a box, entitled *How to Use This Book*, on page 5 of your textbook.
\(^3\) You will be introduced to those tools in the first set of assignments.
• To prepare for the exams, review the lecture presentations, in-class activities, and your personal notes. Also, make sure that you solve the previous exams that are available on Canvas.

• At any stage, feel free to contact me if you have any problems with the concepts or the assignments. I have fixed office hours, and I am also available upon your request.

Some Notes
Read the following notes, and let me know, please, should you have any questions:

• My goal is to create a class in which everyone is welcome, included, and able to learn and succeed. Please talk to me if there is something I need to know in order to facilitate a positive and productive learning experience for you.

• If you require an accommodation based on disability, please let me know during the first week of the semester. Also, please bring the authorized documentation, issued by the Disability Resource Center.⁴

• The academic misconduct policy is as stated in the University of Oklahoma Academic Integrity Code.⁵ Cheating, for instance, is a very serious violation of the code and will be treated as such. Signing the class roll for someone else or having someone else sign the class roll for you is also considered academic misconduct. Honor yourself, and honor the code.

• Except for a standard function calculator, you are not allowed to use your laptop computer, tablet, smart phone, or any other electronic gadget during the lectures or the exams. They must be turned off, in fact. For the assignments you will be using a computer or a tablet. That, however, is done when the class is over. If you want to organize your notes on your computer or tablet, you may do so as well. However, that should also be done after the class.

• As indicated above, you are only allowed to use a standard function calculator (not the one installed on your smart phone) during the lectures or the exams. If you are spending too much on such calculator, perhaps you are purchasing a wrong product. Standard function calculators cost less than $10 these days.

• It is essential that you correctly bubble in your name and your eight digit SoonerID on the scantron for each exam. If you fail to do so, it will cost you points off the exam in question. It costs you two points on the first midterm, four points on the second midterm, and six points on the final.

⁴ You may reach this center via phone. Voice: (405) 325-3852; TDD: (405) 325-4173
⁵ A student’s guide to academic integrity is available at: http://integrity.ou.edu/students_guide.html
Course Outline

- Part I: Introduction
  - Getting Started
    Lecture: 01/18
  - Collecting, Organizing, and Visualizing Observations (Ch. 1 & 2)
    Lectures: 01/20 - 01/30; Assignments Due Date: 02/03, at 11:59 pm
  - Numerical Descriptive Measures (Ch. 3)
    Lectures: 02/01 - 02/10; Assignments Due Date: 02/17, at 11:59 pm
  - Concluding Remarks
    Lecture: 02/13

- The First Midterm on the Introductory Topics (Part I)
  Monday, 02/20 (1:30 - 2:20 pm – Dale Hall 200)

- Part II: Probability
  - Probabilities: A Survey (Ch. 4)
    Lectures: 02/15 - 02/24; Assignments Due Date: 03/03, at 11:59 pm
  - Probability Distributions (Ch. 5 & 6)
    Lectures: 02/27 - 03/10; Assignments Due Date: 03/24, at 11:59 pm
  - Sampling Distributions (Ch. 7)
    Lectures: 03/20 - 03/27; Assignments Due Date: 03/31, at 11:59 pm
  - Concluding Remarks
    Lecture: 03/29

- The Second Midterm on Probability (Part II)
  Monday, 04/03 (1:30 - 2:20 pm – Dale Hall 200)

- Part III: Inference
  - Confidence Interval Estimations (Ch. 8)
    Lectures: 03/31 - 04/10; Assignments Due Date: 04/14, at 11:59 pm
  - Hypothesis Testing (Ch. 9 & 10)
    Lectures: 04/12 - 04/24; Assignments Due Date: 04/28, at 11:59 pm
  - The Analysis of Variance (Ch. 11)
    Lectures: 04/26 - 05/03
  - Concluding Remarks
    Lecture: 05/05

- The Final Exam on Inference (Part III)
  Wednesday, 05/10/2017 (8:00 - 9:00 am – Dale Hall 200)

- The Comprehensive Make-up Exam on Parts I and II
  Wednesday, 05/10/2017 (9:00 - 10:00 am – Dale Hall 200)

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6I reserve the right to make changes in the course outline.
To register for Econ 2843, Sec. 4 (Spring 2017):

2. Under Register, select Student.
3. Confirm you have the information needed, then select OK! Register now.
4. Enter your instructor’s course ID: tabrizy50804, and Continue.
5. Enter your existing Pearson account username and password to Sign In.
   You have an account if you have ever used a Pearson MyLab & Mastering product, such as MyMathLab, MyITLab, MySpanishLab, MasteringBiology or MasteringPhysics.
   ➤ If you don’t have an account, select Create and complete the required fields.
6. Select an access option.
   ➤ Enter the access code that came with your textbook or was purchased separately from the bookstore.
   ➤ Buy access using a credit card or PayPal account.
   ➤ If available, get temporary access by selecting the link near the bottom of the page.
7. From the You’re Done! page, select Go To My Courses.
8. On the My Courses page, select the course name Econ 2843, Sec. 4 (Spring 2017) to start your work.

To sign in later:
2. Select Sign In.
3. Enter your Pearson account username and password, and Sign In.
4. Select the course name Econ 2843, Sec. 4 (Spring 2017) to start your work.

To upgrade temporary access to full access:
2. Select Sign In.
3. Enter your Pearson account username and password, and Sign In.
4. Select Upgrade access for Econ 2843, Sec. 4 (Spring 2017).
5. Enter an access code or buy access with a credit card or PayPal account.