THE UNIVERSITY OF OKLAHOMA

DEPARTMENT OF ECONOMICS

FALL 2022 SYLLABUS

ECON 2843 HONORS STATISTICS — **Prof. Alexander Holmes**
435 Cate Center 1 — **325-2861**
Aholmes @ou.edu

OFFICE HOURS: I will be available every MW 10:30-11:30AM. If that time in inconvenient, please email and we can set another time.

I will NOT use the Canvas email system for individual communications. I will use your OU email address and system for individual communications and will respond ONLY to my OU email and NOT to canvas emails from you. See my email address above.

CLASS TIMES and PLACE: Monday, Wednesday, and Friday, 9:30-10:20 Room 338 Cate Center One

REQUIRED TEXT: FREE on line open source text Open Stax College, *Introductory Statistics,* Alexander Holmes found at:

http://openstaxcollege.org/pages/Introductory Business Statistics
OR go to my web page at the Economics Department web site under "classes". Go to Ou.edu/cas and then to the economics department web site then to Holmes.
OR access Canvas for this course. I suggest that the text be downloaded into your laptop so that it can be accessed during class.

E X A M I N A T I O N S AND GRADED ASSIGNMENTS

There will be two one-hour examinations during regularly scheduled class periods. These will be announced approximately one week in advance. These examinations will each account for approximately 25% of your final grade. You will also write a regression analysis paper that will count for 15% of the grade leaving 35% being determined by a **comprehensive** final examination. The examinations will be problem solving in nature. Past exams with answer key are provided on my website. These are very helpful in getting a grasp of the type of exam questions that will be on the exams. Note please that these questions are not at all like those typically given to a statistics class.

The paper will require you to develop a theory that you will test using regression analysis. First you will be responsible for gathering relevant data and then run the OLS regression you feel tests your theory. And then, of course, write your conclusions. You will receive a detailed written assignment later as we move through the semester. The Regression paper will be due same date of the final exam.

There will be no makeup examinations except for persons securing an official University excused absence through their channels. In any case, no examinations may be made up beyond the final day of regularly scheduled class. It goes without saying that unexcused missed examinations receive a zero grade.

SPECIAL NOTE: Any student who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact me personally as soon as possible to make necessary accommodations.

CLASS PARTICIPATION AND OUT OF CLASS INSTRUCTION

It is hoped that discussion of the topic can be generated in class and thus questions may be cleared up in that way. However, I realize that there are always unanswered (unasked) questions and thus I will be available for more individual help. My standing office hours are listed above. Please feel free to contact me about a mutually convenient time if these do not match your schedule.

COURSE OUTLINE:

The text for this course is an open sourced online FREE text. It is composed of 13 chapters and is augmented by OU On- line videos for each section available through Canvas and/or Mymedia.
We will work our way through the material as follows in Chapters:

1-3 Sampling and Data, Descriptive Statistics, Probability theory
4 Discrete Probability Density Functions
5 Continuous Probability Density Functions
6 The Normal Probability Density Function

HOUR EXAMINATION #1 (Approximately 7th week)

7 The Central Limit Theorem
8 Confidence Intervals
9 Hypothesis Testing Theory
10-12 Various Tests of Hypothesis

HOUR EXAMINATION #2 (Approximately 13th week)

13 Linear Regression and Correlation

COMPREHENSIVE FINAL EXAMINATION:

8:00-10:00 PM December 13, 2022