

ECON2843.004 Elements of Statistics**Syllabus**

Class time and location: Tuesday and Thursday 3:00-4:15pm, Lissa & Cy Wagner Hall 0250.

Instructor: Chang Gao

Office: Cate Center 1, Room 236; Office Hours: Tuesday 1:00-2:30pm

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1. Course objective

Upon completion of this course, my goal is that you are able to: Understand why statistics is important, be familiar with statistical terms and applications, and to recognize the role of statistics in a data-driven context.

2. Assessment

The final grade will be based on your performance from: a) assignments; b) optional final exam; c) attendance.

There will be 18 assignments (open-book and online) on McGraw-Hill Connect (you can access the assignments from Canvas directly). Your final grade will be based on your highest 15 out of the 18 assignments.

a) Please note that 11 of the 18 assignments are in the form of quizzes. For these quizzes, you will have only 1 attempt allowed and a time limit of 45 minutes, you can start the quiz at anytime before its deadline. SmartBook by McGraw-Hill Connect to help you learn are provided with each quiz.

The remaining 7 assignments are case studies that require you to use tools like Microsoft Excel, or any software, or internet resource you prefer. For the case studies, you can make 2 attempts. You can take as much time as you need to complete the case studies, as long as you submit it by the deadline.

b) In addition to the assignments, there is one optional final exam (open-book and online, but with a time constraint) that counts for 45% of your grade. You can choose to take it if you are not satisfied with your grades from the assignments.

c) Although attendance is voluntary, it is strongly recommended. I will take attendance every class and your class attendance and participation will count towards 5% of your final grade. I will waive 3 days of missing attendance.

Your final grade will consist of the higher of the following two calculations plus attendance performance:

$\{15 \text{ highest assignments} \times 100\%, \text{ or } 15 \text{ highest assignments} \times 55\% + \text{final exam grade} \times 45\%\}$

3. Grading Scale

90-100	A	60-64	D
80-89	B	< 59	F
65-79	C		

I reserve the right to adjust this schedule of grade equivalents in the student's favor.

4. Textbook

Business Statistics: Communicating with numbers by Jaggia and Kelly. You can access the ebook from McGraw-Hill Connect.

5. Academic ethics

Cheating on assignments and exams, or plagiarizing (misrepresenting as one's own anything done by another) is penalized by the University of Oklahoma. A student found in such a situation will be given an F in the class and will be brought to University of Oklahoma Honor Council for further penalties. For further information, refer to <https://www.ou.edu/integrity>.

6. Title IX

Title IX is a federal statute prohibiting sex discrimination. Gender cannot be a basis for a person's exclusion from participation in, denial of benefits, or subjecting him or her to discrimination under any education program or activity, including employment. For further information, refer to <https://www.ou.edu/eoo/about/title-ix>.

7. Course Outline (tentative)

Week	Content
1	Introduction to course and world of statistics
2	Data Visualization
3	Summary Measures/Statistics
4	Probability
5	Probability (continued)
6	Probability Distribution
7	Probability Distribution (continued)
8	Sampling and Sampling Distribution
9	Confidence Interval
10	Interval Estimation
11	Hypothesis Testing
12	Chi-Square Test
13	Analysis of Variance
14	Correlation and Regression
15	Lecture & Thanks giving break
16	Applications of Statistics: Returns, Index Number and Inflation