

Econ 290: Statistical Analysis

Rhodes College, Fall 2016

Course Information

Instructor: Dr. Erin Kaplan
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Office: 327 Buckman Hall
Office Hours: Thursday 2:30-4:30pm

Peer Tutor: ZiWei Li

Location: 330 Buckman Hall
Hours: Wednesday 6:00-8:00 pm

Course Description:

Drawing conclusions from limited information is a common characteristic of decision making in economics and business. Although this course is designed to introduce the student to basic concepts of probability and statistics as applied to topics in Economics and Business, emphasis will be placed on the use of statistical inference to reduce the impact of limited information or uncertainty in decision making. Topics will include descriptive statistical measures, probability, random variables, probability distributions, sampling distributions, point and interval estimation, hypothesis testing, time series analysis, regression and the use of index numbers.

Student Learning Objectives:

By the end of the semester students who successfully complete this course will be able to

- Use Excel to create clear and meaningful numerical and graphical summaries of data analyses.
- Calculate the statistics necessary to solve a variety of problems both by hand and with a computer.
- Explain the logic behind statistical tests in the context of both univariate and multivariate analysis.
- Think critically about the application of statistical methods, and recognize the limitations of statistical tools in the context of causal inference.

Course Materials:

- *Essentials of Statistics for Business and Economics* by Anderson and Sweeney
- *Moodle* – All assignments and announcements will be posted on Moodle, so please check the course page frequently.

Course Policies

Attendance:

Success in this class requires regular attendance, preparation, and willingness to ask questions and engage in discussion. Students with recurring extracurricular commitments (athletics, mock trial, etc...) should speak with me in advance about their anticipated absence(s). If you are absent, you are responsible for obtaining notes from a colleague.

Office Hours:

Students are encouraged to attend office hours. The material covered in this course is often challenging, and students should consider office hours an additional resource to aid in their understanding. If you are unable to attend my regularly scheduled office hours, please contact me to schedule an alternative time to meet.

Email:

In general, email is the best way to get in contact with me. However, if you send me an email within 24 hours of an exam or homework deadline, don't expect me to respond before the exam/due date.

Honor Code:

Academic misconduct includes the following examples as well as any other similar conduct which is aimed at falsely representing a student's academic performance: cheating, plagiarizing, using unauthorized aids on an exam, falsifying records, or assisting another individual in any of the above. All instances of academic misconduct will be reported to the Honor Council.

Mutual Respect:

Classroom discussion is meant to allow us to hear a variety of viewpoints, and I encourage respectful disagreement and civilized debate. For this reason, it is vital that we create an environment of mutual respect. Remember that each of us has a unique set of experiences and opinions, and that this diversity is valuable both inside and outside of the classroom.

Use of Cell Phones:

The use of cell phones during lectures is a disrespectful distraction to your instructor and classmates. Please turn off your cell phone while you are in class. In emergency situations, please discuss limited use of cell phone with me prior to the class during which you would like to use your cell phone.

Disability Services:

If you have a disability, please contact the Office of Student Disability Services on the 4th floor of Burrow Student Center (901-843-3885) as early as possible in the term, to verify your disability and determine reasonable accommodations for this course. Please notify me of any necessary accommodations as early in the semester as possible.

Missed Exams:

In the event that you are unable to attend an exam due to an extreme illness or other documented emergency, please notify me as soon as feasibly possible with the appropriate documentation.

Course Grades

Problem Sets (10%) Problem sets are designed to help you practice applying the economic methods taught in class to specific problems. Each assignment will be posted on Moodle at least 1 week prior to its due date. The lowest problem set score will be dropped from final grade calculations, and consequently no late work will be accepted. Students are encouraged to work in groups on the problem sets; however, each student is individually responsible for completing and turning in the assigned work. Simply copying another student's work is a violation of the Honor Code.

Labs (15%) Occasionally, we will meet as a class in the computer lab, and I will give you additional assignments to complete in Excel. These assignments should be completed individually. You should take time to make your Excel work look professional. Below are some suggestions for formatting changes that may help.

- *Change the orientation from portrait to landscape.*
- *Fit to x pages wide by y pages tall (this one works great, just don't let it make the font too small).*
- *Add page numbers in the footer.*
- *Shrink the margins down to ¼ inch.*
- *Print the gridlines and the row/column headers.*
- *Make sure the column width is wide enough so that none of the text is hidden.*
- *You may want to paste Excel tables into a Word document before you print.*

Midterm Exams (40%) There will be two midterm exams, and each exam will be worth 20% of your grade.

Final Exam (35%) The final exam will be held as scheduled by the Registrar's Office. The exam will be comprehensive.

Letter Grades:

Your final grade will be calculated as described above, and corresponding letter grades will be assigned based on the traditional cutoffs listed below. However, I reserve the right to curve final grades up.

A	94-100%
A-	90-93%
B+	87-89%
B	83-86%
B-	80-82%
C+	77-79%
C	73-76%
C-	70-72%
D+	67-69%
D	60-62%
F	0-59%