Economics 307: Principles/Methods of Statistics
Fall 2016

_____

Professor: Katie Lopresti   Schedule: MWF
Email: kelopresti@wm.edu   Section 01: 11:00-11:50
Office: Tyler #243   Location: Tyler 123
Office Hours: 1:15-2:15 MW, 11-12 Tue.

_____

Course Overview: In Principles/Methods of Statistics, you will learn how to collect, display, analyze, and interpret data. We will discuss how to use data and statistics to answer questions and make inferences about an uncertain world. Topics discussed will include descriptive statistics, probability, statistical inference, and regression analysis. At the end of the semester, you will be ready to take the helm and complete your own project – using economics and statistics to answer a question of particular interest to you.

Textbook: There is no required textbook for this class. That said, I think it is helpful to have some statistics book as a reference. A free online version can be found here from Open Intro: http://www.openintro.org/stat/textbook.php.

Student Evaluation: This course consists of 2 midterm exams, a final exam, 5 homework assignments, "one minute papers", 1 journal assignment, and a final paper.

- **Homework**: There will be 5 homework assignments during the semester. Homework is due in class. *No late assignments will be accepted.* . If you are ill and cannot attend class, you may have a friend turn in the homework to me or slide it under my office door before the end of the class period. To access homework assignments, please refer to the Blackboard site for this course. I encourage you to work on homework together, but you should submit your homework written *in your own words,* using your own descriptions and mathematical work. (No homework should be turned in that is simply a duplicate of another student's, even if you worked together.)

Assignment	Due Date
HW 1	Sep. 7th
HW 2	Sep. 21st
HW 3	Oct. 14th
HW 4	Oct. 26th
HW 5	Nov. 18th

- **Exams:** Exam dates are provided below. There will be no make-up exams. Students who are not able to take an in-class exam and who provide appropriate documentation in advance (such as from the Dean of Students Office) will have the final exam reweighted accordingly.

Exam	Date	Time
Exam 1	Sept. 28th	In-class
Exam 2	Nov. 2nd	In-class

Final Exam Date:
- Dec. 8th , 9:00 am- 12: 00 pm

- **Statistics Journal**: Once during the semester, you will be asked to write a brief journal entry. I will provide more detail on this as the semester progresses.

Assignment	Due Date
ENTRY	Oct. 3rd

- **One Minute Papers**: Attendance will not be directly taken in this course. However, at the end of some unannounced class sessions, I will ask you to take one minute and write down what you did not understand during the class period and what you understood the best from that class. This provides me with helpful feedback on the material covered in lecture, as well as providing an incentive for you to attend class.

- **Short Final Project.** This project will be discussed in more detail as the semester progresses, but will involve a short assignment (a topic proposal) to help you prepare for the final paper.

Assignment	Date
Topic Proposal Assignment	Oct. 24th
Final Paper	Nov. 30th

Breakdown of Course Grades:

Component	% of Course Grade
Journal Assignment	2%
One Minute Papers	1%
Homework	10%
Exam 1	25%
Exam 2	25%
Final Paper	10%
Final Exam	27%
Total	**100%**

A grading curve may be determined at the end of the semester. The curve will never be stricter than the 90-80-70-60 scale.

All course grades will be posted on Blackboard. If a student finds a discrepancy between the grade written on 3 their assignment and the grade posted on Blackboard, they have one week after the assignment is returned to bring this to the professor's attention.

Course due dates: I will notify students of any changes in assignment due dates in advance of those posted due dates. Changes in due dates may occur in the event of cancelled classes due to inclement weather or other events that change the pace at which we progress through the course material.

Schedule: This is a tentative schedule of the order in which we will approach topics. Any adjustments to this order will be announced in class.

- Introduction
- Descriptive Statistics
- Probability Analysis
- Random Variables, Joint Probability Distributions, Expected Value, Covariance
- Binomial Distribution and Normal Distribution
- Sampling, Sampling Distribution, Confidence Intervals
- Hypothesis Testing
- Two Sample Tests
- Chi – Square Tests
- Single Variable Regression
- Multiple Variable Regression

Academic Honesty: All students are expected to adhere to the Honor Code: http://www.wm.edu/offices/deanofstudents/services/studentconduct/honorcodeandstudentconduct/honorcode/index.php.
 Students are always encouraged to study together, but all academic work that is turned in should be the student's own work and students should follow all course guidelines.

Class Conduct: During the class period, please put your cell phones away. If there is an urgent reason that you need to access your phone, please exit the classroom to do so.

Student Accessibility Services: Any student with disabilities who feels they may require additional accommodations to assist their academic success based on a physical, psychiatric, learning, or chronic health diagnosis should contact the Student Accessibility Services office. Please notify me well in advance of any exams or other course deadlines and provide documentation from Student Accessibility Services if you require additional accommodations for exams and coursework.

Website: www.wm.edu/sas
Phone: 757-221-2509
Email: sas@wm.edu