

Economics 307: Principles/Methods of Statistics
Spring 2018

Professor: Katie Lopresti

Email: kelopresti@wm.edu

Office: Tyler #243

Office Hours: Mon & Wed: 11:30-12:30

Tue. 10:30-11:30

Class Schedule: M/W

Section 03: 2:00-3:30

Location: Blow 334

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 extremely important to have some statistics book as a reference. I highly recommend “Statistics for Business and Economics,” by Newbold, Carlson, and Thorne: (ISBN-13: 978-0132745659). However, if financial constraints are a concern, a free online version can be found here from Open Intro: <http://www.openintro.org/stat/textbook.php>. (Please see a document posted on Blackboard for more information on textbooks).

Course TA: We are very lucky to have a course teaching assistant this semester, Sam Dreith. Sam will hold weekly office hours in Tyler 228 on Thursdays from 11:00-12:30.

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. *Please do NOT put homework in my mailbox on the 3rd floor.* (As a last resort, in extenuating circumstances, you may email me your homework by class time). 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.)

Homework Due Dates

Assignment	Due Date
HW 1	Jan. 31 st
HW 2	Feb. 12 th
HW 3	March 14 th
HW 4	March 21 st
HW 5	April 16 th

- **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	Feb. 21 st	In-class
Exam 2	March 28 th	In-class

Final Exam Date:

- May 1st, 2:00 pm- 5: 00 pm, Blow 334
- Please double-check your final exam times at <http://www.wm.edu/offices/registrar/calendarsandexams/examschedules/>.

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	Feb. 19 th

- **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 detail as the semester progresses, but involves a short assignment (topic proposal) to help you prepare for the final paper.

Assignment	Date
Topic Proposal Assignment	April 9 th
Final Paper	April 25 th

Breakdown of Course Grades:

<u>Component</u>	<u>% of Course Grade</u>
Journal Assignment	2%
One Minute Papers	1%
Homework	10%
Exam 1	25%
Exam 2	25%
Final Paper (includes Topic Proposal)	10%
Final Exam	27%
Total	100%

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

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

All grades will be posted on Blackboard. If there is a discrepancy between the grade written on 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 or the grade will remain.

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 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. Please do not use your cell phones for any reason (texting, taking photos, etc.). If I see you using your cell phone, I will ask you to put your phone away. If there is an urgent reason that you need to access your phone, please exit the classroom to do so. Also, students are not permitted to listen to music during class or exams.

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. It is your responsibility to 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. If you fail to contact me in advance, you may be unable to use your accommodations for exams and coursework.

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