#### Econometrics - ECON 308 Sections 1 and 4

Instructor: Tatyana Kuzmenko Semester: Spring 2018

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Office: Tyler 425

**Office Hours:** Mon 9:00 - 11:30am, Tues 2:00 - 4:00pm, or by appointment

**Class Meetings:** 

Section 1: MWF 12:00 noon in Tyler 113Section 4: MWF 1:00 pm in Tyler 113

## **Course Description**

A survey of the econometric methods that are commonly used in economic research with emphasis on the application of these techniques rather than their theoretical development.

#### **Textbook and Software**

- **Textbook**: Introduction to Econometrics, Update, 3<sup>rd</sup> edition, by Stock and Watson. Using an earlier edition is fine.
- **Software**: The official software for this course is Stata, which is available on all campus computers. More information about Stata at WM can be found here: <a href="https://www.wm.edu/offices/it/services/software/licensedsoftware/mathstats/stata/index.php">https://www.wm.edu/offices/it/services/software/licensedsoftware/mathstats/stata/index.php</a>

# **Grading**

Grades will be based on homework assignments, class participation, an empirical project, two midterms, and a cumulative final exam. Grade percentages are as follows:

• Homework assignments: 18%

Class participation: 6%Empirical project: 10%

Two midterms: 36% (18% each)Final Exam (cumulative): 30%

- Homework assignments will be available on Blackboard (under "Assignments"). There
  will be 11 problem sets; please see the attached course calendar for homework due dates.
  All assignments will be due at the beginning of class unless specified otherwise. Because I
  post answer keys to Blackboard after the due date has passed, in fairness to all students,
  late homework will not be accepted; however, one lowest homework grade will be
  dropped.
- Class participation can greatly improve your learning experience and your ability to succeed in this course. Please come to class ready to ask questions, work on problems, and answer questions posed by the instructor and other students. Keep in mind that simply coming and sitting in each lecture will not earn you a good score in class participation. Attendance policy: You have to attend class in order to participate in class discussions and activities. Missing more than six class meetings (for any reason) will negatively affect your participation grade. There is no delineation between excused and unexcused absences, and you don't need to tell me about the reason for your absence.
  - *Participation grade replacement*: If speaking up in class is not your forte, your participation grade will be replaced with your final exam grade if the latter is better.
- **Empirical project (group or individual).** One of the goals of this course is for you to gain the ability to conduct empirical analysis in economics and related fields. A testimony to

whether you have achieved this goal is to implement an empirical project on your own. You will choose a dataset, form an interesting economic question, carry out an empirical analysis, give a presentation about your findings in class, and write up a short paper. You are encouraged to form groups of up to three people to work on this assignment, but you may also do it on your own. A topic proposal is due on March 27, and the final paper is due on April 27 (last day of classes). More information about this assignment will be provided in class and on Blackboard.

- **Midterm exams** will be given on the following dates:
  - o Midterm 1: February 28 (Wednesday), during class time
  - o Midterm 2: April 4 (Wednesday), during class time

*Midterm grade replacement:* Your lowest midterm exam score will be replaced with your final exam score if the final is better. This applies to one midterm exam only.

*Midterm make-up policy:* If you know that you will not be able to attend an exam come see me ahead of time with a valid, documented excuse and we will attempt to arrange for you to take the exam before it is given. A midterm exam can be taken after the exam date ONLY if you miss it due to an emergency AND can provide a letter from the Dean of Students office. In all other situations, your final exam grade will be used in lieu of the missed midterm grade.

- **Final Exam** will take place:
  - For the MWF 12:00 noon section: May 9 (Wednesday) at 9:00 am
  - For the MWF 1:00 pm section: May 2 (Wednesday) at 2:00 pm

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93 or more = A

87 - 89.99 = B+

77 - 79.99 = C+

67 - 69.99 = D+

83 - 86.99 = B

70 - 72.99 = C-

67 - 69.99 = D+

80 - 82.99 = B-

70 - 72.99 = C-

60 - 62.99 = D-

81 - 82.99 = B-

82 - 72.99 = C-

83 - 86.99 = D-

84 - 82.99 = B-

75 - 72.99 = C-

85 - 62.99 = D-

86 - 62.99 = D-

87 - 72.99 = C-

87 - 72.99 = C-

88 - 82.99 = D-

89 - 72.99 = C-

80 - 82.99 = D-

80 - 82.99 = D-
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# **Expectations and Additional Policies**

- Please mute all cell phones and turn off any other electronic devices when entering class unless they are used for note-taking or legitimate class-related purposes.
- All files, announcements, assignments, and grades will be posted on Blackboard. Students should check this site regularly.
- Late night emails as well as weekend emails will not necessarily be responded to until the following school day. In all other cases, you should expect a response within 24 hours after sending your message.
- There will be no individual extra credit opportunities. If I offer any extra credit assignments, they will be available to all students in the course.
- You are welcome to study together. However, homework assignments and all exams should be completed without the aid of other students.
- Reference cards and reference sheets on exams: For each midterm exam, you can prepare and bring one 4"x 6" two-sided index card with handwritten notes, formulas etc. For the final exam, you can bring either: (i) one 8.5"x 11" two-sided sheet of paper with handwritten notes and formulas, or (ii) the three index cards you prepared for the midterms.
- The use of unauthorized aid on an exam will be considered a violation of the Honor Code. Please visit <a href="https://www.wm.edu/honor">www.wm.edu/honor</a> to learn more about the Honor Code at William and Mary.

- Grading errors and re-grading: If you believe that your score on an exam or homework was
  incorrect or that you should receive more credit for your work, you have to submit a
  written request for re-grading within one week from the day the exam or assignment was
  returned.
- It is the policy of The College of William & Mary to accommodate students with disabilities and qualifying diagnosed conditions in accordance with federal and state laws. Any student who feels s/he may need an accommodation should contact to Student Accessibility Services staff at 757-221-2509 or at <a href="mailto:sas@wm.edu">sas@wm.edu</a>. For more information please see <a href="https://www.wm.edu/sas">www.wm.edu/sas</a>.

# **Course Outline**

Note: This is a tentative schedule. Please visit Blackboard often for details.

#### Part I. Introduction and Review

- Chapter 1. Economic Questions and Data
- Chapter 3. Review of Statistics

#### Part II. Fundamentals of Regression Analysis

- Chapter 4. Linear Regression with One Regressor
- Chapter 5. Regression with a Single Regressor: Hypothesis Tests and Confidence Intervals
- Chapter 6. Linear Regression with Multiple Regressors
- Chapter 7. Hypothesis Tests and Confidence Intervals in Multiple Regression
- Chapter 8. Nonlinear Regression Functions
- Chapter 9. Assessing Studies Based on Multiple Regression

#### Part III. Further Topics in Regression Analysis

- Chapter 10. Regression with Panel Data
- Chapter 11. Regression with a Binary Dependent Variable as time permits
- Chapter 12. Instrumental Variables Regression
- Chapter 13. Experiments and Quasi-Experiments as time permits

# **Econ 308 Course Calendar**

	Monday	Tuesday	Wednesday	Thursday	Friday
Jan	15	16	17	18	19
	22	23	24	25	26 End of
	PS 1 due				add/drop
	29	30	31	1	2
	PS 2 due				
Feb	5	6	7	8	9
	PS 3 due				
	12	13	14	15	16
	PS 4 due				
	19	20	21	22	23
	PS 5 due				
	26	27	28	1	2
	PS 6 due		Midterm 1		
Mar	5	6	7	8	9
	Break	Spring	Break	Spring	Break
	12	13	14	15	16 Last day
					to withdraw
	19	20	21	22	23
	PS 7 due				
	26	27 Project	28	29	30
	PS 8 due	proposal is due			
Apr	2	3	4	5	6
	PS 9 due		Midterm 2		
	9	10	11	12	13
	16	17	18	19	20
	PS 10 due				
	23	24	25	26	27 Project
	PS 11 due				paper is due
	30	1	2 at 2 pm	3	4
			Final exam		
			1 pm section		
May	7	8	9 at 9 am	10	11
			Final exam		
			12 noon section		
			12 noon section		