

**Econ 345-002**  
Introduction to Econometrics  
Fall 2019  
Department of Economics  
George Mason University

Instructor: Kendra H. Asher  
Location: Innovation Hall 131  
Time: 7:20pm - 10:00pm (Wednesday)  
Email: [khathaw3@gmu.edu](mailto:khathaw3@gmu.edu)  
Office Hours: 5:20pm to 7:20pm (Wednesday)

**Grade**

**40%** Weekly Quizzes  
(Lowest 2 grades will be dropped – no quiz August 28<sup>th</sup> or during presentation weeks)  
**10%** Presentation  
**15%** Homework  
**5%** Class Participation  
**30%** Final Exam

**Textbook**

Introductory Econometrics: A Modern Approach (7e edition) by Jeffrey M. Wooldridge

ISBN-13: 978-1337558860

\* Previous editions of this textbook are available online in PDF form. If used, students are responsible to make sure the chapters correspond to each week's readings, as the quizzes and final exam will be based on the 7e edition's text.

Using R for Introductory Econometrics by Florian Heiss

ISBN-13 978-1523285136

\*A version of this text is available online at <http://www.urfie.net/read.html>

In addition to the textbook readings, I may occasionally send out econometrics papers, which will be discussed in class.

**Schedule (tentative)**

**August 28** – Chapter 1

[https://www.rapidtables.com/math/symbols/Statistical\\_Symbols.html](https://www.rapidtables.com/math/symbols/Statistical_Symbols.html)

Listen to:

<https://www.npr.org/templates/transcript/transcript.php?storyId=473128291>

**September 4** – Chapter 2

<http://www.cazaar.com/ta/econ113/interpreting-beta>

Listen to:

<https://www.npr.org/sections/money/2013/04/23/178635250/episode-453-what-causes-what>

**September 11** – Chapter 3

**September 18** – Chapter 4

Recommended readings:

<https://www.nature.com/news/scientific-method-statistical-errors-1.14700>

<https://www.tandfonline.com/doi/full/10.1080/00031305.2016.1154108>

<https://www.nature.com/articles/s41562-017-0189-z>

**September 25** – Chapter 5 (only section 5.1) & 6

**October 2** – Chapter 7 & 8

**October 9** – Chapter 9 & 10

**October 16** – Chapter 11

Watch:

<https://www.youtube.com/watch?v=0jKjgE3qfE>

<https://www.youtube.com/watch?v=gi7jx5IJtik>

**October 23** – Chapter 12

**October 30** – Chapter 13 & Presentations

**November 6** – Chapter 14 & Presentations

**November 13** – Presentations

**November 20** – Presentations

**December 4** – Machine Learning and Econometrics

<https://arxiv.org/pdf/1607.00699.pdf>

<http://www.econ.ucla.edu/workingpapers/wp239.pdf>

Listen to:

<http://www.econtalk.org/susan-athey-on-machine-learning-big-data-and-causation/>

## **TBD - Final Exam**

### Weekly Quizzes

Every week (excluding the first week and the last two presentation weeks), there will be a quiz with 4-7 questions based on the previous week's assigned readings and the lecture. You will need to master the previous week's material in order to learn the new material. The quiz will be handed out at 7:20pm and I will allow until 7:35pm for them to be completed. If you show up late to class, you still will only have until 7:35pm to turn in your quiz. Your lowest two quiz grades will be dropped.

On most quizzes there will be bonus questions (extra credit). Each bonus question can raise your *final* class grade by 0.25%. Bonus questions can be based on any of the past lectures or homework. Any bonus points received on a quiz, regardless of if that quiz was dropped from your final grade, will be added to your final grade.

### Presentation

Your presentation will be 5-8 minutes long, followed by a few minutes for questions from the class.

Your presentation will be on an econometrics paper of your choice, or if you would like to present original work, that is fine as well. The paper you are presenting must first be approved by me. By October 2<sup>nd</sup>, you *must* send me an email with a link or a copy of the paper you want to present on. Also include in the email a few sentences on why you think this paper is interesting. *Failing to send me an email on the paper you want to present on, or emailing me the paper after October 2<sup>nd</sup> will result in points off for your presentation grade.*

To receive an "A" on your presentation, you must not only present the paper well, but give criticisms of it based on what you learned in class or based on other papers you read on the subject.

A good place to look for an article to present is in the journals listed on page 626 of your textbook

### Homework

Every week (excluding the first week and the last two presentation weeks), there will be a homework assignment given. The assignment for each week will be given on the last slide of the preceding week's lecture. I must receive your homework by the start of class (either via email or turned in on paper). The grade you receive on your homework accounts for 10% of your grade in the class. The homework questions will all involve R coding.

Another component of your homework grade will result in presenting how to answer a homework question to the class (with no notes). Your presentation will account for 5% of your homework grade. Your presentation is meant to be fairly brief and casual.

### Final Exam

The Final Exam is cumulative and closed book. Its questions will be similar to the questions on the weekly quizzes. In fact, be sure to study the quizzes because you may see some repeats!

### Feedback

Feedback on my lectures and lesson plans is highly encouraged. Feel free to email or talk to me after class if you have any ideas for improvement.

### Academic Integrity:

Please see George Mason University's Honor Code <https://oai.gmu.edu/mason-honor-code/>

Cheating, plagiarism, lying, and stealing are prohibited and incidents of such will be reported to the Honor Committee.

### Office of Disability Services:

Let me know if you have a disability and require accommodation. Also contact the office of disability services. All accommodations must be arranged through that office.

<https://ds.gmu.edu/>.

### Enrollment:

You are responsible for verifying your own enrollment. Please see the Registrar's Website for relevant deadlines <https://registrar.gmu.edu/>.