ECN 215 – Econometric Theory and Methods
Fall 2020, MWF 12:00

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Canvas:	https://wakeforest.instructure.com/courses/17819
Office hours:	To be decided after consulting you

Text: Marno Verbeek, *A Guide to Modern Econometrics*, fifth edition, Wiley, 2017

Note on methods: This is an online class: our class sessions will take place via Zoom, and both the midterm and the final exam will be conducted via Canvas. If things go well this Fall I hope to be able to meet at least some of you in person; regardless, we'll do the best we can under the circumstances. In our Zoom sessions, I strongly encourage you to "unmute" to ask or answer questions, and/or to use the Zoom "chat" facility for that purpose.

Objective: The aim of this course is to give you both a theoretical understanding of the principles of econometrics and some hands-on experience of the possibilities and problems of the subject. Econometrics is concerned with the connection between economic concepts, theories and hypotheses on the one hand, and "real world" economic data on the other. Typical econometric tasks include the quantification of economic relationships (such as demand curves), the precise specification of economic theories, and the testing of hypotheses derived from theory. The main tool for these purposes is regression analysis. We shall review and develop some basic concepts of statistics and probability, leading to an examination of regression analysis, its principles and pitfalls. Once sufficient groundwork is established, you will work with an econometric computer program (gretl), first carrying out prepared exercises and then progressing to an original piece of empirical research.

Assessment: Your grade in this class will be based on four elements, as follows:

Midterm exam	20 percent
Project	40
Final exam	30
Homeworks	10

Please note that the project carries a good chunk of the grade. Some notes on the project can be found on the class webpage; you will begin planning work on it around mid-semester and it will be due on Monday November 23.

Syllabus: We will devote approximately 4+ class sessions to each of the following topic headings on average, although some may take somewhat longer than others. You are expected to keep up with the textbook readings; these will be supplemented by handouts on topics which require additional clarification.

1. Introduction and review of probability and statistics: handouts; chapter 1

2. Linear regression 1: chapters 2, 3

3. Linear regression 2: chapter 4

4. Limited dependent variables: chapter 7

5. Methods for panel data: chapter 10

6. Instrumental variables: chapter 5

7. Methods for time series: chapters 8, 9

Midterm exam: Wednesday October 14
Final exam: Monday December 7, 2 pm