

ECN 215 – Econometric Theory and Methods
Fall 2022, MWF 9 am

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Webpage: <http://users.wfu.edu/cottrell/ecn215/>
Canvas: <https://wakeforest.instructure.com/courses/43821>
Office hours: 2 pm to 4 pm Tuesday and Thursday, and by appointment

Text: Riccardo “Jack” Lucchetti, *Basic Econometrics*, online at
<http://users.wfu.edu/cottrell/ecn215/lucchetti.pdf>

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 28.

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 readings; these will be supplemented by handouts on topics which require additional clarification.

1. Introduction and review of probability and statistics: handouts
2. Ordinary Least Squares: chapter 1
3. Statistical inference: chapter 2
4. OLS as inferential tool: chapter 3
5. Diagnostic testing: chapter 4
6. Dynamic models: chapter 5
7. Instrumental variables: chapter 6
8. Additional topics as time permits

Midterm exam: Monday October 10
Final exam: Tuesday December 8, 9 am