BPHD 8120-001/PPOL 8000-003: ECONOMETRICS I

Syllabus for Fall 2015
9:30 a.m. – 10:45 a.m. MW
Friday 207

Instructor
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Office Hours
2:30 p.m. – 3:15 p.m. MW & 4:45 p.m. – 5:30 p.m. MW
If the hours established are not convenient, feel free to make an appointment with me for another time or to stop by at another time when I am in the office.

Course Objectives
The objectives of this course are for you to master basic econometric concepts and apply these concepts to research questions in Economics and Finance.

Means of Student Evaluation
Your grade in this course will be determined by your performance on 6 problem sets and 4 in-class tests. These components will be weighted as follows: 6% for each of the 6 problem sets and 16% for each of the 4 tests. Letter grades for the course will be based on the following scale:

A    90% and above
B    80%-89.99%
C    70%-79.99%
U    below 70%

NOTE WELL: Your grade will be based solely on your performance on the 6 problem sets and the 4 in-class tests. Individual extra credit assignments will NOT be made.

Test Dates
The first test will be on September 23; the second, on October 28; the third, on November 23; and the fourth in the final exam slot for the course (8:00 a.m. – 10:30 a.m. on December 16).

Academic Integrity
Students are required to abide by the UNC Charlotte Code of Student Academic Integrity. Violations of the Code will result in disciplinary action as provided in the Code. The Code is available from the Dean of Students Office or online at http://legal.uncc.edu/policies/up-407.

Disability Accommodations
UNC Charlotte is committed to access to education. If you have a disability and need academic accommodations, please provide a letter of accommodation from the Office of Disability Services early in the semester. For more information about accommodations, you may contact the Office of Disability Services at 704-687-0040 or visit the Office of Disability Services itself in Fretwell 230.
Other
The standards and requirements set forth in this syllabus may be modified at any time by the course instructor. Notice of such changes will be by announcement in class and by email.

The last day to withdraw from courses with grades of W is October 27.

There will be no class meeting on the following dates: September 7 (Labor Day), October 12 (Fall Break), and November 25 (Thanksgiving Break).

On any given class day, if I am more than 15 minutes late for class and you have received no notification from me to the contrary, you may assume that class is canceled.

The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

Textbooks and Other Resources
There are three textbooks that are required for this course:


There are several other good introductory or specialized econometrics textbooks that you may find useful:


Software
I will support STATA for the econometric analyses that you will be doing in this course, but you are welcome to use other software. STATA is available in the public student computer labs (Friday 216 and Friday 338). You may purchase STATA at a reduced rate through the STATA website (http://stata.com/order/new/edu/gradplans/gp-direct.html). The STATA/IC version is sufficient for problem sets you will be assigned in this course and in BPHD 8130 (Econometrics II). If you expect to be working with large datasets in your research, then you may want to consider the STATA/SE version.

A website maintained at UCLA (http://www.ats.ucla.edu/stat/Stata/) has a number of resources that are quite useful for working with STATA. A useful STATA tutorial and the STATA programs and data used in Stock and Watson (2011) are available at http://wps.aw.com/aw_stock_ie_3/.

Outline of Topics and Reading Assignments
I assume that you have a working knowledge of calculus, matrix algebra, and statistics, so we will not review these topics in class. Appendices A and B of Verbeek (2012), Appendices A, B, C, and D of Wooldridge (2013), and Chapters 2 and 3 of Stock and Watson (2011) cover the material that we need.

I. The Two-Variable Regression Model
   Verbeek (2012), Chapter 1
   Wooldridge (2013), Chapters 1 & 2
   Stock and Watson (2011), Chapters 1 & 4

II. The Multiple Regression Model
    Verbeek (2012), Chapter 2
    Wooldridge (2013), Chapter 3, pp. 68-88 & pp. 93-104
    Wooldridge (2013), Chapters 4 & 5
    Stock and Watson (2011), Chapter 6

III. Specification Analysis and Model Selection
     Verbeek (2012), Chapter 3, pp. 58-69
     Wooldridge (2013), Chapter 3, pp. 88-92
     Wooldridge (2013), Chapter 9, pp. 307-308

IV. Functional Form and Structural Change
    Verbeek (2012), Chapter 3, pp. 70-90
    Wooldridge (2013), Chapters 6 & 7
    Wooldridge (2013), Chapter 9, pp. 303-307
    Stock and Watson (2011), Chapter 8

V. Heteroscedasticity
   Verbeek (2012), Chapter 4, pp. 94-111
   Wooldridge (2013), Chapter 8
   Stock and Watson (2011), Chapters 5 & 7

VI. Regression Analysis with Time Series Data
    Verbeek (2012), Chapter 4, pp. 112-134
    Wooldridge (2013), Chapters 10, 11, & 12

VII. Introduction to Forecasting
     Verbeek (2012), Chapter 8
     Wooldridge (2013), Chapter 18
     Stock and Watson (2011), Chapter 14