ECN 209A
Applied Econometrics
Course Syllabus
Spring 2015

Prerequisite:	P-ECN 150 and MTH 109 or 256
Meeting Days:	Tues/Thursday
Meeting Time:	11:00-11:15am
Meeting Room:	Kirby B02
Instructor:	Dr. Christina Marsh Dalton
Office Address:	204B Kirby Hall
Office Phone:	336-758-4495
Office Hours:	Monday 3pm-4pm, Thursday 2-3pm
Course website:	www.users.wfu.edu/daltonc/teaching_209.html

I. Course Description

An introduction to regression analysis methods used to estimate and test relationships among economic variables. Selected applications from microeconomics and macroeconomics are studied. Emphasis is on examining economic data, identifying when particular methods are appropriate, and interpreting statistical results.

II. Course Objective

After taking this class, you will be able to specify and estimate linear regressions using both cross-sectional and time series data, test hypotheses about model parameters, and interpret the estimation and testing results in light of economic theory. You will also learn good data management skills to use when creating and using datasets.

III. Course Material

Required text: *Introduction to Econometrics, 3rd Edition. Stock and Watson*

Software: A great deal of the learning in ECN 209 is accomplished through empirical projects that require the use of statistical software. The software of choice for this class is Stata, and it is freely available to students through Wake. We will go over in class how to get access to Stata.

You can also purchase your own individual license to use the "IC" version (which is "standard" Stata) for 6 months for $69. You may judge whether you prefer to pay for the convenience of a personal copy installed on your own machine. http://www.stata.com/order/new/edu/gradplans/student-pricing/

You will find resources for learning how to use Stata on my page as well as in the text.

http://users.wfu.edu/daltonc/stata/tutorial_tlmrevise.pdf

IV. Methods of Instruction and Work Expectations

You are expected to come to class prepared to discuss the readings. You will have to spend time out of class reading the text as well as reviewing our work in Stata and practicing your data skills. Homework will be assigned every few weeks on MyEconLab.

V. Course Outline [Chapters in brackets]

1. Review of probability and statistics [1, 2, 3]

2. Linear regression with one regressor
(a) Estimation [4]
(b) Inference [5]

3. Linear regression with multiple regressors
(a) Estimation [6]
(b) Inference [7]
(c) Non-linear regressions [8]
(d) Model assessment [9]

4. Changing the dependent variable (order depends on projects)
(a) Panel data [10]
(b) Dummy variables in regression [11]

5. Advanced topics (time permitting)
(a) Instrumental variables regression [12]
(b) Experiments and quasi-experiments [13]

Midterm I is Tuesday, February 17th
Midterm II is Tuesday, March 31st
The final exam is May 5th, 9am.

VI. Electronic Device Policy

Cell phones must be **muted** or turned off and stowed away during class. Laptops may be used in class, but only for purposes directly related to the course (e.g., taking notes and running Stata). This is out of respect for your classmates, your instructor, and your own learning. **If you don't want to learn, don't show up.** Your Facebook checking is much more efficient without me interrupting.

VII. Evaluation and Grading

You will be evaluated on both individual and group activity as detailed below:

2 Midterms:	40% (20 % each)
Final:	20%
Group Project :	20%
Group Proposal	10%
Homeworks:	10%
Total	100%

Homeworks: Econometrics builds on itself throughout the semester. This is in contrast to other more "modular" courses. As such, there will be the opportunity to practice the material in homework assignments. There will be three homework assignments that are graded on a check, check minus, check plus system. An assignment with most questions completely correct receives a check plus, an average assignment a check, and an assignment with many errors or incomplete questions receives a check minus.

The goal of these homeworks is to give you a chance to practice and discuss any questions with the instructor. As such, the grading will be loose, however it is up to the student to make sure they understand each question. These homeworks are practice for the larger grade component of the midterms- it is up to you how much you want to take them seriously.

Midterms: The midterms will include the material covered in class and assigned as reading (whether discussed in class or not) up to *one class period previous* to the exam. Midterms will be in-class, closed-book and closed-note. If you have a letter registered with the Learning Assistance Center & Disability Services, you must inform the instructor within two weeks of the exam in order to schedule accommodation.

Final: Final will be *cumulative* and will include the material covered in class and assigned as reading (whether discussed in class or not). It will be in-class, closed-book and closed-note.

Group Project: You will complete a group project as a part of a team (3-4 individuals). The project will be done in teams, but one-third of your project score will be determined by your team members' evaluations of your performance. The goal of the group project is to give you an opportunity to use the tools and concepts learned in class to evaluate data of interest to you. **Start thinking – what is cool data?! Do you have data from a student activity you're involved in?**

Make-Up Exam policy: No make-up midterms or final exams will be given unless pre-approved by the instructor. Absence due to unavoidable or legitimate circumstances is understood with respect. Such circumstances may include verified illness, jury duty, military service, and religious observances. Students are responsible for providing documentation to the instructor to verify the reason for the absence as far in advance as possible.

Re-Grade policy: Students requesting that their exam must be re-graded have to submit their original exam with a written note explaining the reason for their re-grade request within 2 class days of the time the exams are returned. Any exam submitted for a re-grade will be subject to a complete re-grade by the instructor.

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.