Course Syllabus
ECON 4820 – Econometrics
Fall Semester, 2018
3.0 Credit Hours
(Last updated: 8/22/2018)

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Office: FCBE #411
Office Hours: M 9:00-12:00 and by appointment

Course Overview:

This course provides an overview of elementary econometric theory and methods with applications. The 'application' aspect implies becoming familiar with Stata.

Pre-Requisites/Co-Requisites:

There are no course pre-requisites to enrolling in this course

Required Textbook:

Reference:
Cameron and Trivedi, Microeconometrics Using Stata

Location of Course Materials:
All course materials are located on the eCourseware website.

Stata:
Stata can be accessed https://citrix.memphis.edu/vpn/index.html
To load a dataset, click the followings: open→local disk(C: ...)→users→your id→location of your dataset

Course Objectives:
By successfully completing this course,

1. Students will understand the importance of the assumptions underlying the Classical Linear Regression Model (CLRM)
2. Students will demonstrate an understanding of how OLS works
3. Students will conduct proper inference after using OLS to test single and multiple linear and non-linear hypotheses
4. Students will understand the consequences for OLS when assumptions of the CLRM are violated, including when the data are measured with error
5. Students will demonstrate knowledge of how panel and instrumental variables estimation works
6. Students will develop and prove competency in Stata in order to apply the techniques learned

Fogelman College: Learning Outcomes for Your Degree

This course is designed to help you to meet the overall learning objectives for the BA, BS, or MBA degree offered by the Fogelman College. You should take the time to become familiar with the overall learning objectives as a student:

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<th>BBA</th>
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<td>MA</td>
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Grading and Evaluation Criteria

- There will be two exams (two midterms). The first midterm is on Oct 10th and the second one is on Nov 28th - each worth 30%
- A research project and presentation; the last week of class and final exam week are reserved for presentation. The research paper is due on the final exam date. The research paper does not have to be a big burden. Pick two variables that you are interested in and explore their relationship using the tools that you will learn in this class. – 20%
- There will be 4-6 homeworks. Assigned problems may be mostly empirical, but some are theoretical. The homeworks will be graded on a "check-/check/check+" basis, which roughly corresponds to 60/80/100 points. Homework may be done in groups, but each student must submit their own answers. – 20%

Final course grades are earned according to the following table:

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<th>Point Range</th>
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<td>90-100 Points</td>
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**Final Exam Schedule**

The final exam week is reserved for presentation.

**Course Policies**

**E-MAIL:**

All students are required to maintain and access their University of Memphis (@memphis.edu) email account. You will receive all official course correspondence at this email account. Any inability to receive incoming mail in a timely fashion (e.g., not regularly checking your email, having a “full mailbox” condition, etc.) is the student’s responsibility.

**Attendance:**

You are expected to stay active and engaged throughout the academic term and keep up with the schedule of activities. Your full engagement in the class begins on the first day of the semester and should be maintained until the last assignment is submitted.

**Academic Integrity:**

The University of Memphis has clear codes regarding cheating and classroom misconduct. If interested, you may refer to the Student Handbook section on academic misconduct for a discussion of these codes. Note that using a “Solutions Manual” is considered cheating. Should your professor have evidence that using a “Solutions Manual” has occurred, he/she may take steps as described on the campus’ Office of Student Conduct website. If you have any questions about academic integrity or plagiarism, you are strongly encouraged to review the Fogelman College’s Website on Academic Integrity.

**Student Services**

Please access the FCBE Student Services page for information about:

- Students with Disabilities
- Tutoring and other Academic Assistance
- Advising Services for Fogelman Students
- Technical Assistance
**Topics to be covered (Tentative Course Outline):**

1. Introduction, Review of probability and statistics, Hypothesis tests
2. Regression with single, multiple regressors
3. Nonlinear regression functions
4. Limits of linear regression
   - Binary Dependent Variables, Instrumental Variables, Panel Data (if time allows)