

## **Econ 433: Empirical Economics Research** **Spring 2019**

**Time:** Monday, Wednesday 2:00 PM– 3:50 PM

**Location:** KAP 141

**Instructor:** Hyungsik Roger Moon

**Office:** KAP 310B

**Office Hours:** Monday 11 AM - 12 PM and by appointment.

**Contact Info:** [moonr@usc.edu](mailto:moonr@usc.edu), 213-740-2109 (o)

### **Course Description**

This is an empirical economics research course for undergraduate students. Economics suggests important relationships among economic variables, but rarely suggests quantitative magnitudes of these relationships. Empirical Economics investigates how to estimate or test for these relationships using various forms of data.

### **Learning Objectives**

The main goal of the course is to have undergraduate students experience empirical economic research. Throughout the course, students are expected to find empirically interesting research topics, learn about econometric analyses of data, and econometrics methodologies. Students will learn the basic use of statistical packages, e.g., Stata or MATLAB, depending on their research projects.

**Prerequisite(s):** Econ 317, Econ 318, Econ 303, Econ 305

### **Course Notes**

The grading type is by letter grade. All the class material will be uploaded in Blackboard.

### **Technological Proficiency and Hardware/Software Required**

Students are expected to learn basic statistical packages. For this, I recommend Stata and MATLAB. Both of the softwares are available at the stat lab in KAP.

### **Description of Assignments**

Throughout the semester each student writes an empirical research paper. All the students are required to present relevant literature survey, a proposal, temporary results, and final results, following the prespecified schedule. Also, each student is required to submit **by email** the final version of the empirical research paper. The due date is **May 1**. There is **no extension** of the due date.

### **Reading**

The course is a research course of free topics and students are supposed to find a topic of interest. Specific readings will be assigned prior to each class individually, depending on the progress of the research project.

The following are general econometrics references that are helpful in empirical economic research. All of these books are available from the USC library and [www.amazon.com](http://www.amazon.com).

**Stock, J. and M. Watson, Introduction to Econometrics, 3<sup>rd</sup> ed. Addison-Wesley (SW) (Required)**

Wooldridge, J. Introductory Econometrics, 4th ed. South Western (W)

Angrist, J. and J. Pischke, Mostly Harmless Econometrics, Princeton University Press (AP)

Tray, R., Analysis of Financial Time Series, Wiley. (T)

## Grading

The grades will be based on class participations, in-class presentations, and final draft of the empirical research papers with the following weights:

- Class participation: 10%
- Presentation of project topics: 10%
- Presentation of related literature: 10%
- Presentation of temporary results: 10%
- Presentation of final results: 30%
- Empirical research paper: 30%

## Course Schedule (Temporary, Subject to Change)

Week 1: Econometrics Review. (SW Chapters 1-9).

Discuss research topics of interest. (Empirical economics journals in JSTOR)

Goal: Each student presents his/her research topics of interest and discusses the motivations, relevant papers, data, and relevant econometrics methodologies.

Week 2: Lecture: SW Chapter 11.

Discuss research topics of interest. (Empirical economics journals in JSTOR)

Goal: Each student presents his/her research topics of interest and discusses the motivations, relevant papers, data, and relevant econometrics methodologies.

Week 3: Lecture: SW Chapter 12.

Discuss research topics of interest. (Empirical economics journals in JSTOR)

Goal: Each student presents his/her research topics of interest and discusses the motivations, relevant papers, data, and relevant econometrics methodologies.

Week 4: Lecture: SW Chapter 10.

Discuss topics research of interest. (Empirical economics journals in JSTOR)

Goal: Each student presents his/her research topics of interest and discusses the motivations, relevant papers, data, and relevant econometrics methodologies

Week 5: Lecture: SW Chapter 13.

Discuss research topics of interest. (Empirical economics journals in JSTOR)

Goal: Each student presents his/her research topics of interest and discusses the motivations, relevant papers, data, and relevant econometrics methodologies

Week 6: Lecture: SW Chapter 14.

Existing literature study and presentation of closely related references.

Goal: Students search for relevant literature, present its survey, and discuss the relevance of his/her project.

Week 7: Lecture: SW Chapters 15 and 16

Existing literature study and presentation of closely related references.

Goal: Students search for relevant literature, present its survey, and discuss the relevance of his/her project.

Week 8: Search for data and practice statistical packages (MATLAB or Stata)

Goal: Students search for relevant data and practice a statistical package (e.g., Stata) or learn a programming language (e.g., MATLAB), depending on their computational requirement of the projects.

Week 9: Search for data and practice statistical packages (MATLAB or Stata)  
Goal: Students search for relevant data and practice a statistical package (e.g., Stata) or learn programming language (e.g., MATLAB), depending on their computational requirement of the projects.

Week 10: Presentation of preliminary results.  
Goal: Each student presents his/her initial result and receives feedback.

Week 11: Presentation of preliminary results.  
Goal: Each student presents his/her initial result and receives feedback.

Week 12: Presentation of preliminary results.  
Goal: Each student presents his/her initial result and receives feedback.

Week 13: Presentation of final results.  
Goal: Each student presents the full results of his/her empirical project and receives feedback before submitting the final draft.

Week 14: Presentation of final results.  
Goal: Each student presents the full results of his/her empirical project and receives feedback before submitting the final draft.

Week 15: Presentation of final results.  
Goal: Each student presents the full results of his/her empirical project and receives feedback before submitting the final draft.

### **Submission Policy**

The final draft of the paper should be submitted by **May 1, 2018**. No extension is allowed.

### **Additional Policies**

A missed class will not be deducted from grading if the excuse is based on religious observances, medical emergencies, or acts of nature. In this case the student should provide the professor with a formal written excuse signed by a third party (such as medical staff, police officer, or judge, for example).

### **Statement for Students with Disabilities**

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to TA) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. Website and contact information for DSP: [http://sait.usc.edu/academicsupport/centerprograms/dsp/home\\_index.html](http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html), (213) 740-0776 (Phone), (213) 740-6948 (TDD only), (213) 740-8216 (FAX) [ability@usc.edu](mailto:ability@usc.edu).

### **Statement on Academic Integrity**

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All students are expected to understand and abide by these principles. *SCampus*, the Student Guidebook, ([www.usc.edu/scampus](http://www.usc.edu/scampus) or <http://scampus.usc.edu>) contains the University Student Conduct Code (see University Governance, Section 11.00), while the recommended sanctions are located in Appendix A.

### **Emergency Preparedness/Course Continuity in a Crisis**

In case of a declared emergency if travel to campus is not feasible, USC executive leadership will announce an electronic way for instructors to teach students in their residence halls or homes using a combination of Blackboard, teleconferencing, and other technologies.