Econ 2311

Empirical Methods in Economics I

Spring 2017

Instructor: WANG, Xiupeng
Office: Oak Hall 320
Lectures: TuTh 8:00am - 9:15am Oak 308
Office Hours: TuTh 9:30am - 10:30am
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COURSE DESCRIPTION

This course provides an undergraduate introduction to modern econometrics, in both cross-section and time-series environments. The course focuses on practical and conceptual issues involved in substantive applications of econometric techniques. Estimation and inference procedures are formally analyzed for simple econometric models and illustrated by empirical case studies using real-life data.

Through the training in this course, students should be familiar with economic data and feel comfortable of handling the data. Students should also be able to conduct Âῧquantitative analysis of economic models with probabilistic tools. The course is also aiming to train students in Âῧeconometric techniques, their application, interpreting the results and implement the techniques on the computer.

PREREQUISITE

ECON 1200 or both 1201 and 1202;
and MATH 1071Q or 1110Q or 1121Q or 1131Q;
and STAT 1000Q or 1100Q.

Other Books:

- Stock, James and Mark Watson (2015, updated 3rd Edition): Introduction to Econometrics. Prentice Hall, ISBN-13: 978-0-13-800900-7.

- Prof. Diebold's Econometrics: http://www.ssc.upenn.edu/ fdiebold/Textbooks.html.

- Farnsworth, G., Econometrics in R, http://cran.r-project.org/doc/contrib/Farnsworth-EconometricsInR.pdf

- Dalgarrd, P. (2008), Introductory Statistics with R, Springer.

- Kleiber, C., and Zeileis, A. (2008), Applied Econometrics with R, Springer.

STATISTICAL SOFTWARE

We will use the statistical package R which is free and open source. You can download and install R from http://cran.r-project.org/. Then you can download and install RStudio from http://rstudio.org/download/desktop.

ACADEMIC MISCONDUCT

Academic Misconduct in any form is in violation of the University of Connecticut Student Code and will not be tolerated. This includes, but is not limited to: copying or sharing answers on tests, plagiarism, and having someone else do your academic work. Depending on the act, a student could receive an F grade on the test/assignment, F grade for the course, and could be suspended or expelled from the University. Please see the Student Code at http://www.dosa.uconn.edu/code2.html for more details and a full explanation of the Academic Misconduct policies. With respect to problem sets and reviewing for exams, working in a small group can be very helpful in terms of the learning process. However, each person is still responsible for handing in their own (unique) work.

OTHER UNIVERSITY POLICIES

- http://provost.uconn.edu/syllabi-references/

- Policy Against Discrimination, Harassment and Related Interpersonal Violence

- Statement on Absences from Class Due to Religious Observances and Extra-Curricular Activities

- Suggested Language from the Center for Students with Disabilities

COURSE REQUIREMENTS

(i) **Quizzes (20%):** A few short quizzes throughout the semester based on the materials covered in the previous lecture.
There will NOT be any make-up quiz.

(ii) **Problem Sets (20%):** No late submissions.

(iii) **Midterm Exam (30%):** TBA, closed books and notes, in class.
If you miss the midterm exam, then the final exam will make up 60% of the final grade.

(iv) **Final Exam/Final Project (30%):** The exam will be given on the date scheduled by the university.
Make-up final exam will ONLY be granted through dean of students office.

COURSE OUTLINE

1. Review of Statistics

2. Simple regression model

3. Multiple regression analysis

4. Linear Regression and OLS

5. Regression with qualitative information

6. Heteroskedasticity

7. Hypothesis Testing and ConÂĚdence Intervals

8. Regression analysis with time series data

9. Serial correlation and heteroskedasticity in time series data

10. Pooling cross sections

11. Instrumental Variables Estimation and Two Stage Least Squares