Econ 413: Introduction to Econometrics

SU 2016 S1

Instructor: Stephen Scheid

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Lecture Time and Location: May 23 – June 10, 2016 (MTWRF) from 9 a.m. to 12 p.m. in Seigle Hall Rm 111. The final will be in the computer lab Seigle L016.

Office Hours: by appointment. I will always be available after class.


Optional Textbook: Using Stata for Principles of Econometrics, Lee C. Adkins, R. Carter Hill.

Online Resource: Lecture notes and slides used in class will be posted to blackboard. Any supplementary handouts will also be posted there. For the textbook visit the website principlesofeconometrics.com.

Course Description: This course is designed to introduce students to econometric techniques and their application to data analysis and decision making. After covering some mathematical and statistical preliminaries, we will delve into classic linear regression analysis. Some more advanced topics will follow. Throughout the course we will apply the theories that are covered to specific case studies using real-life data along with Stata, a statistical analysis software package. Students will develop skills used in economic modeling, estimation, inference and, if time permits, forecasting.

Prerequisites: Econ 1011, 1021 and Math 2200 or equivalent.

Course Requirements: Because this is an intense 14-day summer course, grading will mainly depend on homework and course participation plus one data-analysis exercise similar to the questions found in the textbook, which will be completed on the last day of class (6/10) in the computer lab Seigle L016. There will be 5 counting for 60% of the total grade. The test in the lab on the last day of class will count for 25% of the grade. Class participation will count for 15%.

Course Outline: Note that this is a tentative outline, so it will probably change. Any changes will be announced in class.

1. Introduction to Econometrics. Basic Probability and Statistics Review.
2. The Simple Linear Regression Model.
3. Confidence Intervals and Hypothesis Testing.
5. The Multiple Regression Model.
6. Further Inference in the Multiple Regression Model
7. Indicator Variables
8. Heteroskedasticity
9. Time Series Data (if there is time)
10. Binary Response Models (Ch. 16, if there is time)