

Intermediate Econometrics

(2023096)

2 Credits

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Office hours:
Teaching Assistant:

Pre-requisites:

Linear Algebra, Probability and Statistics, Economics

Course Materials (Readings/textbooks):

Introduction to Econometrics James H Stock and Mark W Pearson 2015
Watson

Introductory Econometrics: A Modern Approach, by J.M. Wooldridge. Estimation and Inference in Econometrics, by R. Davidson and J.G. MacKinnon.

Course Description

The course covers key concepts in econometrics and intends to widen and deepen students' knowledge of econometric methods. Students will learn methods for estimating causal effects using observational data, some tools that can be used for other purposes, for example, forecasting using time series data. The course will focus on applications, which means that theory is used only as needed to understand the whys of the methods. Moreover, students will learn to evaluate the regression analysis of others and get some hands-on experience with regression analysis in one's own problem sets.

Learning Objectives/Measurable Learning Outcomes

Learn methods for estimating causal effects using observational data

Learn some tools that can be used for other purposes; for example, forecasting using time series data;

Learn to evaluate the regression analysis of others. This means you will be able to read/understand empirical economics papers in other econ courses;

Get some hands-on experience with regression analysis in your problem sets.

Main Contents

1	Introduction and Review (PS1)
2	Linear Regression with One Regressor
3	Linear Regression with Multiple Regressors (PS2)
4	Assessing Studies Based on Multiple Regression
5	Nonlinear Regression Functions (PS3)
6	Panel Data
7	Instrumental Variables (PS4)
8	Time Series Data
9	Exam

Assignments Description and Deadlines

PS1: about the basic concepts about probabilities and statistics

PS2: about linear regression with multiple regressors and dummy variables

PS3: about nonlinear regression and regression assessment

PS4: about panel data and instrumental variables approaches

Student Evaluation

10% In-class+ 40% Homework+50% Final Exam