

Syllabus of Econometrics

LECTURER

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COURSE OBJECTIVES

Give students some understanding of the science and art of determining what type of model to build, building the model which is most appropriate, testing the model statistically, and finally applying the model to practical problems in forecasting and analysis.

GRADING POLICY

It will be discussed in the class.

REFERENCED BOOKS

1. Wooldridge, J.M. (2006), *Introductory Econometrics: A Modern Approach, Third Edition*, 新月。
2. Greene, William H. (2002), *Econometric Analysis*, fifth edition.
3. Wooldridge, J.M. (2002), *Econometric Analysis of Cross Section and Panel Data*.
4. Davison, R. and MacKinnon, J.G. (2003), *Econometric Theory and Methods*.
5. Maddala, G.S. (1983), *Limited-Dependent and Qualitative Variables in Econometrics*.
6. Hsiao, Cheng (2003), *Analysis of Panel Data*, Second Edition.

TOPICS

1. Matrix Algebra
2. Ordinary least squares (OLS) estimation of the simple regression model: Estimation, tests, and prediction.
3. OLS estimation of the multiple regression model
4. Extensions of the multiple regression model: Dummy independent variables
5. Generalized least square (GLS): Heteroscedasticity and serial correlation
6. Discrete regression model
7. Limited dependent variable
8. Instrumental variables
9. Panel data
10. SUR