IPHD 7009 Applied Micro-Econometrics

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Time and Location: TBA, Kinmen

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Secretary: TBA

Course Description:
   This is a topic course for iPhD students in Kinmen, aiming to conduct a modern empirical policy analysis. Due to the extensive availability of individual-level (micro) data sources in applied economic analysis, it is getting increasingly important to understand the techniques available to the microeconometrician in empirical work. It is essential to relate these techniques to economic theory. We then obtain the insights drawn from the estimation of microeconometric models of choice. The econometric techniques of handling those microeconometric model move beyond the standard tools of econometric analysis.

   This class is a graduate level field course which provides you with sufficient background in modern microeconometrics to choose techniques fitted both to the data and the economic model. We will focus on discrete choice models, limited dependent variable models, panel data models and causal inference (or duration model). The goal is to build up a foundation for applied research in economics. The coursework will be theoretical in nature, but students will also be required to use the methods to estimate certain models and test certain hypotheses.

Prerequisites:
   Not necessary but statistics or equivalent graduate level econometrics is recommended

Required Reading:
  Basically, I will hand out weekly lecture notes which are the summary of literature and textbooks. Note that you don't need to buy all the following references. If you are not comfortable with basic concepts of econometrics, it would be helpful to consult to the following references anytime.

- [JD] Johnston and DiNardo, 1997, *Econometric Methods,* 4th edition, McGraw Hill.

- [G] Greene, W. H., 2011, *Econometric Analysis*, 7th edition, Prentice Hall.

- [CT] Cameron A. C. and P. K. Trivedi, 2005, *Microeconometrics*, Cambridge.

- [W] Wooldridge, J. M., 2010, *Econometric Analysis of Cross Section and Panel Data*, 2nd edition, MIT Press.

- [K] Kennedy, P. A., 1998, *A guide to Econometrics*, 4th edition, MIT Press.

- [DS] DeGroot M. H. and M. J. Schervish, 2002, *Probability and Statistics*, 3rd edition, Addison Wesley.

- [CB] Casella, G. and R. L. Berger, 2001, *Statistical Inference*, 2nd edition, Duxbury.

- [R] Ruud, P. A., 2000, *An Introduction to Classical Econometric Theory*, Oxford.

- [DM] Davidson, R. and J. D. MacKinnon, 2004, *Econometric Theory and Methods*, Oxford.

  Of course, there are lots of textbooks related to this course such as the classical book by G. S. Maddala in 1983. You could easily check it out from the library. If necessary, you are welcome to consult with me for more references.

References:
  We will offer more references as the course progresses.

Software: You are welcome to use any econometric packages such as *STATA, or R.*

Grading: The final grade depends on regular (weekly or bi-weekly) in-class presentations, participation and quality of the final paper.

Presentation	30%
Participation	10%
Final Paper	60%.