

INTERNATIONAL UNIVERSITY OF JAPAN
Graduate School of International Relations

Academic Year: 2016/2017

Term: Spring

Course	Course code ADC6515	Course title Cross Sectional and Panel Data Analysis	
Name of Instructor	Chun Yee (Jenny) Wong		Credit Number: 2
Instructor's contact Information	Office# N/A	Office Hours TBA	E-mail: cyjenwong@gmail.com
Class Schedule Day / Time	Monday / 2:40 p.m. – 5:50 p.m.		

Course Description:

This course is to provide students with econometric theory and computational skills which are essential for data analysis. The emphasis will be placed on the application of the theory from a practical point. The course mainly builds upon the microeconomic methods including the linear and non-linear regressions, panel data analysis and the limited dependent variable models, and students will learn how to use Stata to conduct model estimations.

Learning Objectives:

Upon successful completion of the course, students should be able to:

- demonstrate an understanding of the key concepts of microeconomics that can be applied to analyze cross-sectional and panel data,
- use computational skills to perform data analyses, and
- critically evaluate and discuss empirical research.

Career Relevance:

Knowledge of regression model and its extension is essential for understanding and doing empirical work in economics and other social sciences. In this course, students will be prepared with the data analysis knowledge and skills for their future roles such as policy-makers and academic researchers.

Course Context or Rationalization:

This course focuses on the econometric theories and empirical skills for performing analysis on cross-sectional and panel data. Number of empirical economic papers will be covered which are closely related to various fields of economics including development economics and policy evaluation.

Delivery Methods:

This course consists of lectures and hands-on practice in computer laboratory.

<p>Assessment:</p> <p>Assignments (30%), midterm exam (30%), and final exam (40%).</p>	
<p>Prerequisites:</p> <p>Statistical Methods, Mathematics for Economics and Management, and Econometrics/Data Analysis.</p>	
<p>Textbook(s)</p>	<p>Required textbook:</p> <p>Jeffery M. Wooldridge, <i>Introductory Econometrics: A Modern Approach</i>, 5th Edition, South-Western CENGAGE Learning.</p> <p>Books for reference:</p> <p>William Greene, <i>Econometrics Analysis</i>, Fifth Edition, Prentice Hall.</p> <p>Jeffery M. Wooldridge, <i>Econometric Analysis of Cross Section and Panel Data</i>, Second Edition, the MIT Press.</p> <p>A. Colin Cameron and Pravin K. Trivedi, <i>Microeconometrics Using Stata</i>, Revised Edition, Stata Press.</p>
<p>Class Outline</p>	<ol style="list-style-type: none"> 1. Review of cross-sectional regression <ul style="list-style-type: none"> • OLS estimation • Data and specification issues 2. Panel data analysis <ul style="list-style-type: none"> • Pooled cross sections model • First differencing method • Fixed effects method • Random effects method 3. Program evaluation <ul style="list-style-type: none"> • Difference in differences • Instrumental variable • Regression discontinuity 4. Qualitative dependent variables <ul style="list-style-type: none"> • Linear probability model for binary response • Probit and logit models • Ordered probit and logit models • Multinomial logit model 5. Limited dependent variables <ul style="list-style-type: none"> • Censored and truncated data • Tobit model • Sample selection 6. Other topics (time permitting) <ul style="list-style-type: none"> • Quantile regression, decomposition, propensity score matching.
<p>Others (if any)</p>	<p>The syllabus is subject to minor changes along the progress of the course.</p>