Principle of Econometrics Econ 4650-009 Fall 2015

Meeting Time and Location: Online Class

Instructor: Komson "Off" Chanprapan

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Office: OSH209 by appointment

Course Description: Econometrics is one of the most useful tool in social and behaviorial science or even pure science. It uses statistical tools to deal with data in order to find the patterns of relationship among data sets. It aims to explain the variation in data through the "model" and use it to forecast the variation of data under different assumptions. Econometrics in a very important knowledge for higher level of education and is widely demanded in private sector companies. This class provides the theoretical understandings of econometric theories and allows students to learn the applications of the theories to real data through the use of statistical program (Stata).

Prerequisites: College Algebra, ECON3620, ECON3650 or instructors consent.

Credits: 3 semester credit hours

Textbook: A. H. Studenmund, *Using Econometrics: A Practical Guide* (Any Edition), Pearson.

Optional:

D. Pavelin, *Principles of Econometrics: Stata Survival Guide manual* (ebook-\$41.22), McGraw-Hill. [ISBN: 9781308565361] **or**

A. C. Acock, A Gentle Introduction to Stata (Any Edition), Stata Press.

Course Objectives: Students become familiar with econometrics theories especially multivariate regression analysis, both in statistical foundations and applications through the use of statistical software (Stata). By the end of the course, students should be able to learn how to collect, summarize, and analyse cross-sectional and time series data.

Assignments and Exams:

All of assignments and exams are on Canvas page (https://utah.instructure.com/courses/347650). Students are responsible to check every announcement on Canvas.

| Individual Assignments | 30% |
|---|-----|
| Class Project 1 (Due 12/20 by midnight) | 20% |
| Midterm Exam $(10/15-16)$ | 20% |
| Final Exam (12/17-18) | 30% |

Stata can be used through the CSBC Virtual Lab (for support, go to https://support.csbs.utah.edu/virtual-lab) or in computer lab in OSH.

Grading:

A >85 A- 81-85 B+ 76-80 B 70-75 E <30

And/or by curving (I will decide which one will be the best for majority).

Policy: No make-up exams will be given, regardless of reason, except when required under University regulations. I will only give a makeup midterm and final if:

- 1. You are very ill and have to be under a physicians care for this condition. Supply of a note from your physician has to be provided.
- 2. An immediate family member is very ill or has an emergency situation and you have a good reason why this prevents you from attending the exam. I will be the judge of whether your reason is good enough

Class Schedule:

| Week 1 | Review of Statistics |
|---------|------------------------|
| Week 2 | Regression Analysis |
| Week 3 | Ordinary Least Squares |
| Week 4 | Ordinary Least Squares |
| Week 5 | Hypothesis Testing |
| Week 6 | Assignment 1 |
| Week 7 | Logistic Regression |
| Week 8 | Model Specification |
| Week 9 | Fall Break |
| Week 10 | Midterm Exam |
| Week 11 | Time Series Analysis |
| Week 12 | Time Series Analysis |
| Week 13 | Assignment 2 |
| Week 14 | Final Project Proposal |
| Week 15 | Final Project |
| Week 16 | Final Project |
| Week 17 | Final Exam |