Applied Econometrics
Peking University HSBC Business School

Professor: H. Selcuk Celil

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Office: PHBS 733

Office Telephone: T.B.D.

Class Hours: Monday & Thursday, 8:30 AM – 10:20 AM

Office Hours: Monday & Thursday, 4:00 PM – 5:00PM

> I strongly encourage you to contact me on a regular basis and discuss the topics of our class in office hours. Regardless of my office hours, you can also try reaching me via email and schedule an appointment.

Teaching Assistant: Ahmet Cenk, email: anoktacenk@gmail.com

Course Website: http://cms.pkusz.edu.cn

Prerequisites:

You are required to have completed the prerequisite courses, as specified by PKU HSBC Business School. It is assumed that students have taken basic courses in mathematics and statistics before taking this course, and they are familiar with concepts of classical linear regression model.

Purpose and design of the course:

This course mainly introduces the classical parametric models and their applications in economics, and finance. This course starts from the classical linear regression model and extend the model's assumptions one by one, so that more general models and methods could be introduced in an orderly way. Each model is both motivated and illustrated with its application, and normally accompanied by corresponding data set. Special emphasis is given on analyzing the data set by using suitable econometric software (i.e. Stata, R, EViews, Microfit, MatLab, C/C++, SAS, MS Office) and interpreting the output in order to understand, replicate, and extend a previous scientific research in respective fields.

Note: You are free to use your own choice of statistical software. However, Stata will be used in-class illustrations.

Grading:

The final evaluation for your performance in this course will be based on student's attendance, individual homework assignments, and a group project, which will consist of both a presentation and a write-up. The grading will be based on:

    a) *Attendance:* Attendance is expected in this class. There will be an sign-up sheet distributed among the class participants in each class. If a student provides an excuse prior to the class time, upon approval of the instructor of class student can be excused for missing a class. Furthermore,

student who misses class beyond reasonable frequency will automatically loss the class participation grade.

b) *Individual homework assignments:* There will be 4 homework assignments, which will consist 5% of students' grade. Necessary information and tools will be provided to student. Students can work as a group but have to turn in their own work before the respective deadline.

c) *Proposal:* Proposal should contain a motivation, goal, empirical methodology, and contribution of the empirical paper that students intend to replicate and extend as a group during the module. At the beginning of module each student will assigned to a group which consist of 4 to 6 people (depending on class size), and they will work together towards finishing their own project. *Tentative submission deadline for proposal is December 12th, 2013*

d) *Presentations:* Presentation should contain a summary of paper that a group of students select to replicate, its' empirical framework and results, and extension of it, if any. Presentations can be done by different group members as long as they do not go over time allowance. However, each group member should be able to answer any questions regarding the content of original paper, and their group work.

e) *Write-up:* Project write-up will be due on January 18th at 11:59 p.m. More instructions and guidelines will be provided during the course.

f) *Peer group evaluations:* Student will grade their fellow group members and themselves on the following criteria: punctuality, contribution, quality, and collaboration. These evaluations will be used to determine the final grade of a student. More instructions and guidelines will be provided during the course.

Component	Weight
Attendance	10%
Homework assignment	20%
Project proposal	20%
Final project: Presentation, write-up, and peer group evaluation	50%

Required Text Book: **T.B.D.**

Jeffrey M. Wooldridge, "*Introductory Econometrics: A Modern Approach*", 4th edition, Tsinghua University Press

Additional Recommended Text Books:

William H. Greene (2012), Econometric Analysis, 7th Edition

Peter Kennedy (2008), A Guide to Econometrics, 6th Edition

Note: Supplementary materials will be provided on course website. The list of papers in various fields of finance & economics will also be provided on course website in order to provide real world applications of the material covered in class.

Academic Integrity & Ethics:

As a student you are responsible for upholding academic integrity standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit: http://dean.pku.edu.cn/2011xssc/kswgclff_jyb.htm

Accommodations for disability:

Students with disabilities and needs assistance are required to get in touch with me as soon as possible and provide the documentary evidence if it is necessary. I will be happy to accommodate your needs.

Tentative Schedule (Subject to Change)

Week	Note
1	Overview of the Course; How to read a scientific article; Review: Classical linear regression model
1, 2	Multiple regression models (MLR); Further issues on multiple regression models
2,3	Dummy variables and linear probability models;
3,4	Heteroskedasticity; Other assumption violations of classical MLR
4,5	Introduction: Time series analysis; Introduction: Panel data analysis
	PROPOSAL
6, 7	Issues in time series analysis; Issues in panel data analysis
7, 8	Illustrated empirical papers
8, 9	Student group presentations