# Chinese University of Hong Kong, Fall 2019

# ECON5121A: Econometric Theory and Applications

## Instructor:

### Shi, Zhentao

Office hours: Fridays 4-5 pm, or by appointment

Office: 934 ELB

Email: [zhentao.shi@cuhk.edu.hk](mailto:zhentao.shi@cuhk.edu.hk)

**Teaching Assistant:**

Lin, Lin

Office hours: Wednesday 4-5 pm, or by appointment

Office: 513 CKB

Email: [michellelinlin@link.cuhk.edu.hk](mailto:michellelinlin@link.cuhk.edu.hk)

## Lecture Hours and Venue:

Monday 12:30—3:15 pm, ELB 302

Dates: September 2, 9, 16, 23, 30;

October 14, 21 (**midterm**), 28;

November 4, 11, 18, 25

**Topics (tentative):**

### This course is an entry-level graduate econometrics course. Knowledge of econometrics and statistics at the undergraduate level is prerequisite.

### Review of probability theory

### Conditional expectation and linear projection

### Least squares estimator

### Basic asymptotic theory

### Hypothesis testing

### Panel data models

### Endogeneity and instruments

### Generalized method of moments

### **Textbooks:**

### Hansen (2019): Econometrics ([<http://www.ssc.wisc.edu/~bhansen/econometrics/>](http://www.ssc.wisc.edu/~bhansen/econometrics/)) *Downloadable for free*

### Stachurski (2016): A Primer in Econometric Theory *available at CUHK Bookstore*

### **Lecture Notes:**

### <https://github.com/zhentaoshi/Econ5121A>

**Evaluations:**

### Assignment (10%)

### Midterm (45%): **Oct 21**

### Final (45%): **TBD**

**Academic Honesty:**

### Attention is drawn to University policy and regulations on honesty in academic work, and to the disciplinary guidelines and procedures applicable to breaches of such policy and regulations. Details may be found at <http://www.cuhk.edu.hk/policy/academichonesty/>.