A. Information on Instructor
Instructor: H. H. Kwok
Office: 1109 K. K. Leung Building
Email: kwokhh@hku.hk

B. Programme Learning Outcome
PLO1. Understanding of fundamental theories and new development in economics
PLO2: Mastering of skills in analyzing economic data
PLO3: Demonstration of ability to apply economic knowledge and analytical skills to address policy and business problems
PLO4: Awareness of ethical concerns in economic issues
PLO5: Mastering of communication skills

C. Course Description and Objectives
Course Description:
This course is an introduction to econometric theories and applications at the Ph.D. level. The course considers application in economics and finance. Students are expected to be proficient in calculus, matrix algebra, and econometrics at the undergraduate level (i.e., ECON0701). Potential topics to be discussed include:
1. extremum estimators;
2. time series econometrics;
3. panel data econometrics;
4. limited dependent variables
5. spatial econometrics
6. high-dimensional econometrics.
Course Objectives:
1. To acquire and internalize knowledge of statistical methods used by economists
2. To develop the ability to discern which method is most appropriate in a given situation, and understand the limitations of the chosen method

D. Learning Outcomes
By the end of this course, students should be able to:
CLO1: State and derive the basic properties of extremum estimators and the conditions under which they apply
CLO2: Apply the time series and panel data econometrics
CLO3: Understand some basic spatial econometrics and high-dimensional econometrics
CLO4: Understand some topics in the research frontiers

E. Alignment of Program and Course Outcomes
The following matrix indicates the alignment between the course learning outcomes and the program learning outcomes.

<table>
<thead>
<tr>
<th>Program Learning Outcome</th>
<th>Associated CLO</th>
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</thead>
<tbody>
<tr>
<td>PLO1-5</td>
<td>CLO1-4</td>
</tr>
<tr>
<td>PLO1-5</td>
<td>CLO1-4</td>
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F. Teaching and Learning Activities
Teaching and learning takes place through weekly lectures.

Teaching and Learning Activities (TLA):
TLA1: Lecture (Instructor gives lectures on major concepts and issues.)
TLA2: Consultation (Instructor holds weekly consultation hours to answer students’ questions.)

Suggested Readings:
Lee, Myoung-jae. 2010. *Microeconometrics: Methods of Moments and*
G. Assessment
Your grade in this class is determined by the midterm examination (40%) and the final examination (60%). The midterm examination will be held in class. Both examinations are compulsory.

Alignment among course intended learning outcomes, teaching and learning activities and assessment tasks:

<table>
<thead>
<tr>
<th>CLO</th>
<th>TLA</th>
<th>Assessment task</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLO1-4</td>
<td>TLA1-2</td>
<td>Mid-term and final exams</td>
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H. Standards for Assessment
The basis for assessment is a weighted numerical average of students’ midterm and final examination scores. For a “pass” mark students are expected to be able to understand and solve problems of a similar difficulty level as the “review problems” in Hayashi’s text.

I. Academic and Class Conduct
1. Plagiarism and copying of copyright materials are serious offenses and may lead to disciplinary actions. You should read the chapters on “Plagiarism” and “Copyright” in the Undergraduate/Postgraduate Handbook for details. You are strongly advised to read the booklet entitled “What is Plagiarism?” which was distributed to you upon your admission to the University, a copy of which can be found at http://www.hku.hk/plagiarism. A booklet entitled “Plagiarism and How to Avoid It” is also available from the Main Library.
2. Consulting previous semesters’ answer keys or referring to any examination papers not available on the course webpage or in the Library’s ExamBase database are strictly prohibited.
3. Academic violations will result in automatic failure of the course, and may result in further disciplinary action, up to and including discontinuation of studies.