**厦门大学研究生课程教学大纲**

**XMU Graduate Course Syllabus**

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| 课程名称  Course Title  (In Chinese) | **高级计量经济学（2）** | | |
| 课程英文名称  Course Title (In English) | Advanced Econometrics（2） | | |
| \*课程编码  Course Number |  | 面向对象  Teaching Object | **M.A and Ph.D students at WISE and SOE** |
| 先修课程或  预备知识要求  Prerequisite Course | Calculus,Linear Algebra, Probability & Statistics,  Advanced Econometrics I | | |
| 课程学科分类  Classification of Curriculum | □一级学科课程  First Level Discipline  □二级学科课程  Second Level Discipline  □研究方向课程  Courses for Orientation | 课程内容分类  Course Content Classification  （可多选）  [Multiple Choice](https://www.baidu.com/link?url=8l7GIehQd9v3tzJEcyvcjzZ706pytyb3EOABRd8MyghznnpkdEsecQJvsIgLQZ_JFlhDQWhwxWMRrmQiVmP6bLZY68fJYZXfK6ps9vnbA5trB0tc_SbKb882He2l3MYf&wd=&eqid=9e47cda200034705000000065880317e) | 🗹理论讲授 Lecture  □实验 Experiment  □实务 Practice  🗹方法论Methodology □文献 Literature  □案例 Cases  □其他Others （请注明）Please mark out. |
| 总学分/总学时  Total Teaching  Hour/Credit | 3/56 | 实践（含实验）学分  Practice(Including Experiments)  Credits | 0 |
| 教学目的  与要求  Course Objectives  &  Requirements | This course covers,various econometrics models and related methods, from conditional means to possibly nonlinear conditional  moments to the entire conditional distributions,in a unified and coherent framework. A brief review of asymptotic analytic tools and how they are used to develop the econometric theory, are also provided in each chapter. By going through the course material, students will learn how to do asymptotic analysis for econometric models, and will be able to understand more specialized or more advanced econometrics textbooks. | | |
| 教学主要内容  Course Contents | The course consists of 9 chapters. Chapter 1 is a general introduction  to econometrics. Chapter 2 introduces a general regression analysis. Chapter 3 introduces the classical linear regression analysis. Chapters 4 to 7 are the generalizations of classical linear regression analysis when various classical assumptions fail.Those chapters cover time series data, robust variance-covariance matrix estimator when there exist conditional heteroskedasticity and autocorrelation,  and instrumental variable estimation. Chapter 8 introduces the generalized method of moments. Chapter 9 introduces the maximum likelihood estimation and the quasi-maximum likelihood  estimation methods for conditional probability models and other nonlinear econometric models. | | |
| 教学进度  （章节内容及提要）  Course Requirements  (Please write according to chapters.) | Week 1-2 Chapter 1 Introduction to Econometrics  Chapter 2 General Regression Analysis  Week 2-5 Chapter 3 Classical Linear Regression Models  Chapter 4 Linear Regression Models with I.I.D. Observations  Week 5-8 Chapter5 Linear Regression Models with Dependent Observations  Chapter 6 Linear Regression Models under Conditional  Heteroskedasticity and Autocorrelation  Week 8 Midterm  Week 9-10 Chapter 7 Instrumental Variables Regression  Week 10-12 Chapter 8 Generalized Method of Moments Estimation  Week 12-14 Chapter 9 Maximum Likelihood Estimation and Quasi-Maximum Likelihood Estimation  Week 15-16 Final exam week | | |
| 理论与实践（含实验）教学安排  Theory and Practice  (including experiments)  Course Plan | Econometric models and theories will be discussed during lectures. Monte Carlo simulations and empirical projects might be assigned as problem sets. | | |
| 教材或参考书  主要文献资料  或相关数据库  Required Textbook  &  Main Reference Book | Lecture Notes on Advanced Econometrics, by Prof.Yongmiao Hong | | |
| 作业要求  Requirements  of  Homework | Determined by each instructor | | |
| 考核方式  Method of Examination | 🗹笔试 Close-book Examination □口试 Oral Examination □考察 Group Work □论文 Paper □其他 Others (请注明) (Please mark out.) | | |
| 成绩构成  Composition of Final Grade | Final 50%, Midterm 40%, Problem set and attendance 10% | | |
| 备注  Tips |  | | |

\*新开设课程可不填写课程编码，同意开设后由教学秘书编码并填入本表。