## 厦门大学研究生课程教学大纲

## XMU Graduate Course Syllabus

课程名称 Course Title (In Chinese)		高级宏观经济学(2)	)
课程英文名称 Course Title (In English)	Advanced Macroeconomics II		
*课程编码 Course Number	050010006	面向对象 Teaching Object	学术硕博士生一年级 First year graduate students (academic track)
先修课程或 预备知识要求 Prerequisite Course	A	高级宏观经济学 1 Advanced Macroeconom	ics 1
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	■理论讲授 Lecture ■实验 Experiment □实务 Practice ■方法论 Methodology ■文献 Literature □案例 Cases □其他 Others 上机编程 (请注明)Please mark out.
总学分/总学时 Total Credit/ Teaching Hour	3/64	实践(含实验)学 分 Practice(Including Experiments) Credits	

教学目的 与要求 Course Objectives &	动态随机一般均衡模型(DSGE)是当前宏观经济理论的标准分析工具,而融合实际经济周期理论(RBC)中的 DSGE 结构特征、并且其假设偏离古典宏观经济模型基本假设的新凯恩斯主义模型则是当前宏观经济理论发展的前沿领域。
Requirements	This is the second of the required core courses in advanced macroeconomics for graduate students. Dynamic stochastic general equilibrium (DSGE) models have become the standard workhorse models for the analysis of economic fluctuations.  本课程内容主要分为两方面: 一是在方法论上介绍 DSGE 模型的分析、求解、仿真及其拓展方法,二是在理论上介绍新凯恩斯主义模型的基本框架。现代宏观经济学相当倚重于数量分析,为此,本课程将传授给学生运用计算机程序(首推 MATLAB)操作数量分析练习的方法。此外,本课程推荐学生下载基于 MATLAB,该工具箱可用于求解、模拟和估计 DSGE 模型。
教学主要内容 Course Contents	The primary focus of the course will be on the analysis, solution, estimation, and extension of DSGE models. In addition, students will be introduced to basic tools in the New Keynesian modelling approach, which combines the DSGE structure characteristic of Real Business Cycle (RBC) models with assumptions that depart from those found in classical macroeconomic models.  Modern macroeconomics is a quantitative science. As such, students will be expected to perform quantitative exercises using a computer program, most preferably MATLAB.
教学进度 (章节内容及提要) Course Requirements (Please write according to chapters.)	<ol> <li>Numerical methods, RBC models and applications         Approximating and solving DSGE models with an emphasis to solution methods based on logarithmic approximations and undetermined coefficient method. At the end of the course, students should be able to solve simple DSGE models by hand, and to solve medium-to-large scale DSGE models with computer programs.         1) Motivation and introduction: growth and business cycles.             - Mankiw 2006.         </li> </ol> <li>Approximating and solving DSGE Models with numerical method.</li> <li>- Uhlig 1999.</li> <li>Simple DSGE Models: Examples including simple RBC models, extended with labor supply, adjustment cost of investment, taxation, etc.</li> <li>- Uhlig 1999.</li>

4) An RBC model application to China on the economic effects of political

movements.

- Kwan and Chow 1996.

## 2 New Keynesian DSGE models and monetary policy

This part deals with the New Keyensian DSGE framework to discuss inflation, monetary policy and the business cycle.

- 1) From RBC to New Keynesian evolvement
  - Gali 2008, Chapter 1.
- 2) A classical monetary model
  - Gali 2008, Chapter 2.
- 3) New Keynesian model with monopolistic competition and nominal rigidity
  - Gali 2008, Chapter 3.
- 4) Taylor rule: Empirical evidence of monetary policy with interest rate as the instrument
  - Taylor 1993, 2011.
  - 5) Monetary policy design in the basic New Keynesian model
    - Gali 2008, Chapter 4.
  - 6) Monetary policy tradeoffs: discretion vs. commitment
    - Gali 2008, Chapter 5.
  - 7) Monetary policy alternatives at the zero interest rate bound
    - Bernanke, Reinhart and Sack, 2004.

## 3 Empirical methods that bring models to the data

This part includes topics on basic techniques of data preparation and parameter calibration specific to macroeconomic research.

- 1) Removing trends and isolating cycles
  - DeJong and Dave 2007, Chapter 3.
- 2) Spectral analysis (Optional if time allows)
  - Hamilton 1994, Chapter 6.
- 3) Calibration (Optional if time allows)

理论与实践(含实验) 教学安排

Theory and Practice (including experiments)

Course Plan

- 1) 第一周学习 Matlab 编程基础,上机练习,配合助教课
- 2) 第二至第六周伴随着学习数值方法,在课堂讲授中穿插学习使用 Matlab 程序包 Toolkit 求解模型和分析,课堂讲授和助教上机课相结合
- 3) 作业题体现上机编程等内容,助教课讲解和审查编程作业
- 4)下半学期穿插编程和实证上机练习,辅助课堂讲解和助教课

教材或参考书 主要文献资料 或相关数据库 Required Textbook & Main Reference Book	<ul> <li>D. N. Dejong and C. Dave, Structural Macroeconometrics. Princeton University Press, 2007. Chapter 3 and 6.</li> <li>Jordi Gali, Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework. Princeton University Press, 2008. Chapter 1 - 5.</li> <li>James D. Hamilton, Time Series Analysis. Princeton University Press, 1994. Chapter 6.</li> </ul>
作业要求 Requirements of	每两周一次作业,计入平时成绩。且平行班统一作业内容与评分标准。
Homework	
考核方式 Method of Examination	■笔试 Close-book Examination □□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	平时 20%: 作业、课堂小测验、出勤 期中 35% 期末 45%
备注 Tips	

<sup>\*</sup>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。