Preliminary Detalied Syllabus for Macro II Part II, Spring 2025

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Overview

- The course introduces workhorse models used in the i) business cycle, ii) frictional labor market and iii) incomplete markets literatures. Emphasis will be put on developing analytical techniques for actively working with these models as well as understanding their core implications. We will also repeatedly explore the usage of micro data to inform macroeconomic models.
- 14 lectures:
  - 6 lectures (20 hours) on business cycle models
  - 4 lectures (13 hours) on frictional labor markets
  - 3 lectures (7 hours) on incomplete asset markets
  - 1 summing-up/Q&A session
- 7 TA sessions: 1 tutorial session on using Dynare / 6 sessions on graded problem sets
- Basic proficiency with Matlab is assumed; there are a lot of tutorials you can check online.
- The Ph.D. Macro Book (December 2025 version) is our main textbook. Core readings are marked with a *. The other listed readings are highly recommended. In addition to this material, we will discuss some additional papers in class, these readings are for the interested.

Lecture 1 - RBC: Business Cycle Facts and the baseline RBC model (3 hours)

1. Business cycle facts
2. Math preliminaries
3. The Real Business Cycle model: Setup and solution

4. The Real Business Cycle model: Analysis

Readings

- *Ph.D. Macro Book, Chapter 14 (including the appendix).
- Eric Sims's lecture notes entitled "Preliminaries", "Log-lineariziation", "Using Dynare", "RBC (qualitative)" and "RBC (quantitative)"
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Lecture 2 - RBC: accounting, measurement, extensions

1. Business cycle accounting
2. Measuring technology shocks
3. Labor market extensions
    - Employment lotteries
    - GHH preferences

Readings

- *Ph.D. Macro Book, Chapter 14 (including the appendix).
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Lecture 3 - RBC: investment Dynamics

1. RBC setup with firm ownership of capital
2. Neoclassical theory vs. Q theory of investment
    - Investment adjustment costs in the RBC model

Readings

- *Ph.D. Macro Book, Chapter 14 (including the appendix).
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- *Eric Sims's lecture notes entitled "RBC extensions"

Lecture 4 - The New-Keynesian model: basics (3 hours)

1. Evidence concering the effects of monetary policy
2. The vanilla NK model: setup and equilibrium
3. Determinacy and Taylor rules

Readings

- *Ph.D. Macro Book, Chapter 18 (including the appendix).
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Lecture 5 - The New-Keynesian model: mechanics

1. Monetary policy shocks
2. TFP shocks

Readings

- *Ph.D. Macro Book, Chapter 18 (including the appendix).
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Lecture 6 - The New-Keynesian model: policy

1. Sources of ineffiency
2. Optimal monetary policy
3. Quantitative NK models: A helicopter view

Readings

- *Ph.D. Macro Book, Chapter 18 (including the appendix).
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Lecture 7 - Frictional labor markets: basics (3 hours)

1. Labor markets facts: stocks, flows and prices
2. Mathematical preliminaries
3. Search in partial equilibrium (the McCall model)

Readings

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Lecture 8 - Job ladders and wage dispersion

1. The AKM regression
2. The Burdett-Mortensen model

Readings

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Lecture 9 - Unemployment: statics

1. The matching function
2. Diamond-Mortensen-Pissarides: setup and solution
3. Diamond-Mortensen-Pissarides: static analysis

Readings

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- *Ph.D. Macro Book, Chapter 20 (including the appendix).

Lecture 10 - Unemployment: efficiency and dynamics

1. Diamond-Mortensen-Pissarides: Efficiency
2. Diamond-Mortensen-Pissarides: dynamic analysis

Readings

- *Ph.D. Macro Book, Chapter 20 (including the appendix).
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Lecture 11 - Incomplete markets: Basics

1. Basic facts about the distribution of income, wealth and consumption
2. Aggregation with complete and incomplete markets
3. Consumption-savings dynamics with incomplete markets

Readings

- *Ph.D. Macro Book, Chapter 5 and 11 (including the appendix).
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Lecture 12 - Incomplete markets: Buffer-stock savings (3 hours)

1. The buffer-stock savings model
    - Setup, computation and calibration
    - The consumption function
2. Applying the Buffer-Stock Savings Model
    - Gourinchas-Parker: life-cycle savings dynamics
    - Blundell-Pistaferri-Preston: consumption and Income inequality
    - Kaplan-Violante: illiquid assets and the marginal propensity to consume

Readings

- *Ph.D. Macro Book, Chapter 11.
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Lecture 13 - Incomplete markets: General equilibrium

1. The Ayiagari model
    - Recursive competitive equilibrium
    - Asset convergence
    - The Ayiagari diagram
2. Applications
    - Explaining wealth inequality
    - Taxation

Readings

- *Ph.D. Macro Book, Chapter 11.
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Lecture 14 - Course summary and pre-exam Q&A