10,383: Topics in Economics

ECTS credits: 4

Overview examination/s
(binding regulations see below)
Decentral - Oral examination (individual) (50%)
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Attached courses
Timetable -- Language -- Lecturer
10,383.1.00 Topics in Economics -- Englisch -- Föllmi Reto, Koeniger Winfried

Course information

Course prerequisites
Solid courses in macroeconomics at the Master level, such as Advanced Macroeconomics 1 and 2.

Students who plan to take this course as an optional course and without an examination should not register via the bidding system. They should register directly with the lecturer.

Students who plan to take this course as a regular course or as an optional course with an examination should register via the bidding system. Enrolment in a course is binding: students have to attend the course and take the exam. The grade will be shown on the scorecard.

Course content

The course covers two important topics in macroeconomics. The first topic is inequality and growth. The second topic is the analysis of dynamic stochastic equilibrium models with incomplete markets.

The first part of the lecture focuses on two main questions. First, how does the distribution of income and wealth evolve in a market economy? Under which conditions does the gap between rich and poor people tend to increase or decrease over time? In that context, we review central propositions of Piketty’s influential book, “Capital in the 21st century”.

Second, we study the impact of heterogeneity (through income inequality or different types of firms) on central economic phenomena: International Trade, economic growth, and structural change. These strands of literature have gained in importance as firm-level datasets have become available. Their results shed new light how much countries gain quantitatively from opening up to trade.

The second part of the lecture introduces students to dynamic stochastic equilibrium models with incomplete markets which have become workhorse models for the analysis of monetary and fiscal policy. Unless one is willing to make very restrictive assumptions about the underlying environment, equilibria in these models need to be approximated numerically by dynamic programming. Students will thus learn some numerical methods required for dynamic programming. We then apply these methods within the macroeconomic workhorse model with incomplete markets.

Qualification: Students will be guided to the frontier of macroeconomic research to perceive why heterogeneity matters for macroeconomic outcomes. They will identify sources of inequality and understand the heterogeneous effects of fiscal or monetary policy. Students will learn the methods to perform policy analysis within this research field in their own research projects.

Course objectives: The goals of the course are to provide an introduction to the macroeconomic literature on heterogeneity across consumers and firms and incomplete markets. Further, students (i) should understand the methods to build models with heterogeneity and (ii) know empirical procedures to test them. Finally, they will be able to solve a dynamic program and apply these methods to a problem of their interest.

The main learning outcomes are that students understand the macroeconomic workhorse models with heterogeneity and incomplete markets, that students can start to write code to solve that model, that students are able to interpret the numerical
output and that students are able to evaluate economic policies within that model.

**Course structure**

The first part of the course on inequality and growth is structured in the following way:

1. Introduction; empirical motivation: inequality-growth, Kuznets-curve, evolution of top incomes
2. Savings, growth and Piketty’s law of capitalism: Neoclassical theory of distribution, dynamics of distribution with perfect markets
3. Product market imperfections and firm heterogeneity: Innovations and growth, heterogeneous firms and international trade

The second part of the course on dynamic models with incomplete markets is structured as follows:

1. Dynamic programming: introduction and some solution methods
2. Application to models with exogenously incomplete market: stylized facts and puzzles, the life-cycle model with exogenous market incompleteness, liquidity constraints, precautionary savings, computation of equilibrium, joint analysis of durable and non-durable consumption, household debt and bankruptcy
3. Models with endogenous market incompleteness: limited commitment and asymmetric information

**Course literature**

Part 1:
Further papers see detailed syllabus in Fall.

Part 2:
The following books give an accessible introduction and background to some of the covered topics.


Below are further readings for each topic of the lecture:

1. **Dynamic programming**

2. Application to models with exogenously incomplete markets


2.1 Household debt and bankruptcy


3. Endogenous incomplete markets


**Additional course information**

The course is offered in the second half of the semester in six 4-hour lectures.

**Examination information**

**Examination sub part/s**

1. **Examination sub part (1/2)**

   **Examination time and form**
   Decentral - Oral examination (individual) (50%)

   **Remark**
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   **Examination-aid rule**
   Open Book
   Students are free to choose aids but will have to comply with the following restrictions:

   - At such examinations, all the pocket calculators of the Texas Instruments **TI-30 series** are admissible. Any other pocket calculator models are inadmissible.
   - In addition, any type of communication, as well as any electronic devices that can be programmed and are capable of communication such as electronic dictionaries, notebooks, tablets, PDAs, mobile telephones and others, are inadmissible.
   - Students are themselves responsible for the procurement of examination aids.

2. **Examination sub part (2/2)**

   **Examination time and form**
   Decentral - Oral examination (individual) (50%)

   **Remark**
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   **Examination-aid rule**
   Open Book
   Students are free to choose aids but will have to comply with the following restrictions:

**Examination languages**

Question language: English
Answer language: English
At such examinations, all the pocket calculators of the Texas Instruments **TI-30 series** are admissible. Any other pocket calculator models are inadmissible. In addition, any type of communication, as well as any electronic devices that can be programmed and are capable of communication such as electronic dictionaries, notebooks, tablets, PDAs, mobile telephones and others, are inadmissible. Students are themselves responsible for the procurement of examination aids.

**Supplementary aids**

**Examination languages**

Question language: English
Answer language: English

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**Examination content**

content covered in class and in the lecture notes

**Examination relevant literature**

First part of the lecture: lecture notes, book by Bertola et al. See course literature

Second part of the lecture: W. Koeniger, lecture notes; see also the corresponding parts of the course literature.

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**Please note**

We would like to point out to you that this fact sheet has absolute priority over other information such as StudyNet, faculty members’ personal databases, information provided in lectures, etc. When will the fact sheets become binding?

- Information about courses and examination time (central/decentral and grading form): from the start of the bidding process on 23 August 2018
- Information about decentral examinations (examination-aid rule, examination content, examination relevant literature): after the 4th semester week on 15 October 2018
- Information about central examinations (examination-aid rule, examination content, examination relevant literature): from the start of the enrolment period for the examinations on 05 November 2018

Please look at the fact sheet once more after these deadlines have expired.