FIN-406 **Macrofinance**

Lambertini Luisa, Mondragon Minero Jorge, Pröbsting Christian

Cursus	Sem.	Type
Financial engineering minor	H	Opt.
Financial engineering	MA1, MA3	Obl.

Language of teaching	English
Credits	4
Session	Winter
Semester	Fall
Exam	Written
Workload	120h
Weeks	14
Hours	**4 weekly**
Lecture	2 weekly
Exercises	1.5 weekly
Number of positions	

Remark

For sem. MA1. Special schedule: see the IF website http://sfi.epfl.ch/mfe/study-plan

Summary

This course provides students with a working knowledge of macroeconomic models that explicitly incorporate financial markets. The goal is to develop a broad and analytical framework for analyzing the interaction of financial decisions, macroeconomic events and policy decisions.

Content

1. Consumption and Savings
   - Consumption and Saving Decision in an Endowment Setting
   - Investment
   - Equilibrium Interest Rate

2. Asset Pricing and the Macroeconomy
   - CAPM
   - Equity Premium and Asset Pricing Puzzles
   - Tobin's Q
   - Yield curve

3. Monetary Policy and Fiscal Policy
4. Models with Financial Intermediaries
5. Macroeconomic Effects of Covid-19

Keywords

Macroeconomics, Financial Economics, General Equilibrium.

Learning Outcomes

By the end of the course, the student must be able to:

- Construct a general equilibrium model of an economy
- Analyze what drives intertemporal choices (savings, etc)
- Model financial decisions
- Develop an economic model encompassing financial decisions

- Assess / Evaluate the effect of financial decisions on macroeconomic variables
- Assess / Evaluate the effect of macroeconomic events
- Expound the role of monetary and fiscal policies and their effects on the macroeconomy
- Analyze what drives asset prices
- Derive testable implications for asset prices
- Search and collect appropriate data
- Test hypotheses using data

Transversal skills

- Plan and carry out activities in a way which makes optimal use of available time and other resources.
- Use a work methodology appropriate to the task.
- Give feedback (critique) in an appropriate fashion.
- Continue to work through difficulties or initial failure to find optimal solutions.
- Access and evaluate appropriate sources of information.
- Collect data.

Teaching methods

Lectures will take place on Wednesday, 9:15 to 12:00. Lectures will focus on how to develop a macroeconomic model that integrates financial markets. Lectures will first present the theory and then discuss the empirical relevance and applications.
Exercises will take place on Monday, 13:15 to 15:00. Exercise time will focus on solving the problem sets, doing exercises related to class material, and carrying out applications of what you learned in class. Students will be divided in groups and given a project that must be returned in the last week of class.

Expected student activities

Problem sets will be given out on a Wednesday and need to be returned to the instructor at the beginning of class the following Wednesday. The solution to the problem set will be posted on the class web page. Late problem sets are not accepted.
Each student must turn in his/her problem set.
Problem sets will range from analytical derivation of results to data analysis and testing, and to coding a simple macroeconomic model to calculate its steady state and to analyze its dynamic response to a macroeconomic shock. Coding will be done in Matlab.
The problem sets are extremely important as they are the best way for the student to learn the material and do well in the exams.

Assessment methods

30% Problem sets
30% Group project
40% Final Exam

Supervision

Office hours	Yes
Assistants	Yes
Forum	No

Resources

Virtual desktop infrastructure (VDI)

Yes

Bibliography

Main textbook:
Foundations of International Macroeconomics by Maurice Obstfeld and Kenneth Rogoff, The MIT Press, 1996.
Other
Advanced Macreonomics by David Romer, The McGraw-Hill Companies, 1996.
Recursive Macroeconomic Theory by Lars Ljungqvist and Thomas J. Sargent, The MIT Press, 2nd edition, 2004

Ressources en bibliothèque

- Recursive Macroeconomic Theory / Ljungqvist
- Foundations of International Macroeconomics / Obstfeld
- Advanced macroeconomis / David Romer

Notes/Handbook

A full set of course notes will be posted on the class web page after class. Notice that the course material is password restricted.

Moodle Link

- http://moodle.epfl.ch/course/view.php?id=6261