



Research Institute in
Economics and Finance

Summer School in Economics and Finance 2023

SYLLABUS

I. General Information

Course : **Public Finance**
Duration : 8 sessions – January 2023
Times : 7:00 pm – 10:00 pm
Instructors : **Diego Ascarza and Alex Carrasco**
E-mail : fiecsdiego13@gmail.com, alexcm@mit.edu

II. Course Contents

This is a class in Public Economics – the economics of taxation, spending, government programs, etc. In this course we will cover topics that will allow you to understand the language that people in the Public Finance literature use to discuss current and past research. The course has two big parts: 1) in the first-part we will cover the widely known Ramsey approach to Optimal Taxation and 2) in the second-part we will study the mechanism design approach also called Mirrleesian approach. For each of these approaches we will cover both static and dynamic environments.

III. List of Topics

Session	Topics
1	Foundations: Dynamic preferences, aggregation / representative agent, and equilibrium
2	Static Ramsey: Elasticities and Optimal Taxes, Lump-sum taxes, Uniform Commodity Taxation, Intermediate Goods Taxation.
3 AND 4	Dynamic Ramsey: Chamley-Judd result, Capitalists vs Workers (1985), Dividend Taxes (Mcgrattan and Prescott – 2005), Heterogeneous agents and Redistribution (Werning – 2007), Life-cycle taxation (Erosa and Gervais – 2002).
5	Mechanism design: Welfare economics, social choice and mechanism design.
6	Static Mirrlees: Introduction to mechanism design, non-linear taxation and a simple example.



7	Computation: Computing a static Mirrlees economy and externalities
8	Dynamic Mirrlees: The Inverse Euler Equation, Immiseration result.

IV. Main Reference

The main reference for this course will be our lecture notes, which is a compilation of several lecture notes and book references. You can find more detailed references in the notes.

V. Grading System

Class grade will be based on a final exam (60%) and one problem set (40%). The Problem Set will be a great way of preparing yourself for the final exam.

$$\textit{Final Grade} = 0.6 (\textit{Final exam}) + 0.24 * (\textit{PS})$$

VI. RESUMEN DEL CV DE LOS DOCENTES

- Diego Ascarza is a Ph.D. Candidate in Economics at the University of Minnesota and Director of Macroeconomics Research Initiative at the RIEF.
- Alex Carrasco is a Ph.D. student in Economics at the Massachusetts Institute of Technology (MIT).