

Ph.D in Economics
LUISS Guido Carli

List of courses

Version: August 2015
(subject to changes)

First-Year Courses

Mandatory courses (held at EIEF)

Topics in Industrial Organization

Period: November 9 - December 18, 2015

Credits: 6

Instructors: Liliane Giardino-Karlinger

This course takes an advanced approach to industrial organization, with a focus on competition theory as applied to antitrust policy. We will start with static oligopoly theory, reviewing the main concepts and game theoretic tools needed to understand strategic interaction in imperfectly competitive markets. We then explore oligopoly theory in a dynamic framework, and investigate how oligopolists can sustain above-competitive levels of profits if they interact repeatedly in the market place. Our findings will demonstrate how advanced economic theory can inform policy makers (in our case: antitrust authorities) and help them make better choices.

Financial Markets, Prices and Information

Period: February 8 - March 18, 2016

Credits: 6

Instructors: Paolo Vitale

In this course we apply game theory techniques to the analysis of informational issues in financial markets. The concept of Nash equilibrium under asymmetric information will be presented in the specific context of the activity of rational agents in financial markets. We will see how private information is transmitted through prices, how strategic traders balance the trade-off between information revelation and speculative profits, and how the market structure conditions the price formation process.

Evidence and Methodologies in Empirical Banking

Period: March 29 - May 6, 2016

Credits: 6

Instructors: Alberto Franco Pozzolo

The course presents a critical review of the major contributions of the empirical literature on the role of banks. Topics covered include: the role of financial intermediaries; the characteristics of lender-borrower relationships and the role of soft and hard information; multinational banking and the role of distance; credit risk transfer; the recent financial crisis. Particular emphasis will be devoted to the discussion of the econometric techniques used in the empirical analysis.

Optional courses (held at EIEF)

Review courses

Microeconomics Review Course

Period: September 21 - October 23, 2015

Credits: 6

Instructor: Daniele Terlizzese

Preferences and utility, choice under uncertainty. Consumer theory. The competitive firm. General equilibrium and welfare. Information economics.

Macroeconomics Review Course

Period: September 21 - October 23, 2015

Credits: 6

Instructor: Pierpaolo Benigno

Review of consumption theory in deterministic and stochastic environments, and under complete and incomplete markets. Basics of asset pricing. Investment. Real business cycle models.

Econometrics Review Course

Period: September 21 - October 23, 2015

Credits: 6

Instructors: Marco Lippi, Giuseppe Ragusa

Multivariate ARMA models. Structural VAR models. Co-integration. GARCH and stochastic volatility models. Asymptotic theory for linear and nonlinear estimators. IV and GMM. Models for discrete and limited dependent variables. Panel data models.

Finance Review Course

Period: September 21 - October 23, 2015

Credits: 6

Instructors: Sergio Scarlatti, Stefano Herzel

The aim of the course is to provide an introduction to the theory of mathematical finance. It is divided into two parts: the first part will present some basic results on Stochastic Processes that are necessary for the study of continuous time models. The second part will show some fundamental results in the theory of Asset Pricing and the Black-Scholes model for option pricing.

Applied Microeconomics

Industrial Organization

Period: February 8 - March 18, 2016

Credits: 6

Instructor: Andrea Pozzi

Demand estimation: homogeneous and differentiated goods. Dynamic demand models. Demand and competition with search costs.

Economics and Politics

Period: March 29 - May 6, 2016

Credits: 6

Instructor: Marco Battaglini, Stefano Gagliarducci

Battaglini: Focused on analytical models of political institutions, this course is organized around canonical models and their applications. These include models of: electoral competition, voting behavior, bargaining in legislatures, lobbying, communication and cheap talk games, information aggregation in elections.

Gagliarducci: Randomized experiments, regression discontinuity design and difference-in-difference estimators applied to models of preferences aggregation, electoral competition, political agency, legislative organization and bureaucracy.

Economics of Networks

Period: March 29 - May 6, 2016

Credits: 6

Instructors: Eleonora Patacchini

Network topology. Applications of network analysis: education, labor markets, immigration.

Macroeconomics

Monetary Economics: Theory of Money

Period: November 9 - December 18, 2015

Credits: 6

Instructors: Francesco Lippi

Theory of money in classic models and models with frictions. Money in equilibrium. The optimum quantity of money. Sticky prices and money: individual decisions and aggregate behavior. Money and incomplete markets.

Monetary Economics: Monetary Policy

Period: February 8 - March 18, 2016

Credits: 6

Instructors: Luigi Paciello

The course studies modern theories of optimal monetary policy. Fiscal-Monetary theories of inflation. Monetary policy in the New-Keynesian model.

Macroeconomic Theory: Heterogenous-Agent Models

Period: February 8 - March 18, 2016

Credits: 6

Instructors: Facundo Piguillem

This course will review in detail the literature on Stochastic Dynamic Programming. We will start studying a canonical recursive problem. We will learn how to show the existence, uniqueness (or not) and main properties of bellman equations. The goal in these lectures is to build a toolbox that allows students to prove analogous results in less standard models. Then we move to Aiyagari-Bewley-Hugget economies and Angeletos' model of uninsured investment risk. We analyze in detail the main characteristic and implications of self-insurance standard model using the martingale convergence theorem and show the existence and uniqueness (or not) of a wealth distribution in general equilibrium. Finally we study how to analyze these models when there is aggregate uncertainty and new versions of it like "HANK".

Monetary Economics: Empirical Macro

Period: March 29 - May 6, 2016

Credits: 6

Instructors: Jean-Paul L'Huillier

Solution of DSGE models. Estimation through VARs. Structural estimation.

Econometrics

Latent Variable Models

Period: November 9 - December 18, 2015
Credits: 6
Instructors: Francesco Bartolucci

Latent variables and unobserved heterogeneity. The EM algorithm. Generalized linear mixed models. Latent class and latent regression models. Models for panel data based on the state-space formulation. Latent Markov models.

Topics in Macroeconometrics

Period: November 9 - December 18, 2015
Credits: 6
Instructors: Marco Lippi

Relative importance of permanent and transitory components in GDP growth. Trend-stationary and difference-stationary models. Unobserved components models. Supply and demand components. Real business cycle (RBC) theory. New Keynesian approach vs. RBC.

Bootstrap and Asymptotic Refinements

Period: February 8 - March 18, 2016
Credits: 6
Instructors: Samantha Leorato

Asymptotic approximation for the empirical distribution function. Glivenko-Cantelli and empirical central limit theorems. The bootstrap principle. Consistency of bootstrap estimates and remedies to inconsistency. Subsampling and pre-pivoting. Asymptotic refinements. Bootstrap for dependent data

Topics in VAR Modeling

Period: February 8 - March 18, 2016
Credits: 6
Instructors: Massimo Franchi

Representation and inference in stationary and co-integrated systems. Common cyclical features.

Advanced Econometrics

Period: March 29 - May 6, 2016

Credits: 6

Instructors: Alberto Holly (HEC Lausanne)

The purpose of the course is to increase students' knowledge in Advanced Econometrics by deepening some of the topics that they may have learned earlier, or by introducing new concepts. Students should be able, to better understand the theoretical basis of advanced estimation and hypothesis testing procedures proposed in the recent literature. They should also be able to prove the statistical properties of the estimators or testing procedure that they may develop for their PhD Thesis

Finite Mixture Models

Period: March 29 - May 6, 2016

Credits: 6

Instructors: Roberto Rocci

Finite mixture models for nonparametric estimation of probability density functions and for unsupervised classification. EM algorithm and ML estimation of mixture models. Finite mixture of linear regression models. Choice of the number of components.

Econometrics of DSGE Models

Period: March 29 - May 6, 2016

Credits: 6

Instructors: Giuseppe Ragusa

This is a course on the econometric techniques used in estimating dynamic macroeconomic models (DSGE models).

Finance

Theoretical Asset Pricing

Period: November 9 - December 18, 2015

Credits: 6

Instructors: Nicola Borri

Consumption-based asset pricing. Contingent claims, discount factors and mean-variance frontiers. Factor pricing models, models with habit formation, models with long-run risk. Topics in empirical asset pricing. Portfolio theory.

Corporate Finance

Period: November 9 - December 18, 2015

Credits: 6

Instructors: Sergei Kovbasyuk

Firm valuation, capital structure in perfect markets, financing capacity and agency costs (managerial incentives, credit rationing, liquidity and risk management, lemons problem and market freeze), security design. Some macroeconomic implications of corporate finance (capital squeeze, credit crunch).

Empirical Asset Pricing

Period: November 9 - December 18, 2015

Credits: 6

Instructors: Daniele Massacci

Introduction and background. Empirical models of stock returns: linear models for the conditional mean (e.g., white noise, autoregressive random walk, vector autoregressive); nonlinear models for the conditional mean (e.g. threshold, smooth transition, Markov-Switching, and structural break models); volatility models (e.g., RiskMetrics, GARCH models and stochastic volatility). Contagion. Stock returns predictability. Asset allocation. Interval and density forecasts. Risk Management.

Household Finance

Period: February 8 - March 18, 2016

Credits: 6

Instructors: Luigi Guiso

Definition of the field, measurement of household preferences and beliefs; the assets side: portfolio allocation and portfolio puzzles; trading, rebalancing; life cycle assets allocation and management. The liability side: choice of mortgages, debt management, default decisions. Household financial capabilities; consumer protection.

Banking

Period: March 29 - May 6, 2016

Credits: 6

Instructors: Giancarlo Spagnolo

Theories of financial intermediation. Competition, reputation and the regulation of financial and information intermediaries. The regulatory debate after the financial crisis.

Second-Year Courses

Research for Thesis Writing

Credits: 48

DEF Seminar series

Credits: 6

EIEF Seminar series

Credits: 6

Reading Group series

Credits: 6

Visiting Student in Foreign Institution

Credits: 6

Third-Year Courses

Thesis Defense

Credits: 48

DEF Seminar series

Credits: 6

EIEF Seminar series

Credits: 6

Reading Group series

Credits: 6

Visiting Student in Foreign Institution

Credits: 6