

Ph.D in Economics
LUISS Guido Carli

List of courses

Version: October 2014
(subject to changes)

First-Year Courses

Mandatory courses (held at LUISS)

The Overlapping Generations Model: An Introductory Course

Period: September 24 - October 24, 2014 (Wed. 14-16 (13:30-15:30),
Fri. 11:30-13:30)

Credits: 6

Instructors: Medio

Basic models I: pure exchange, no money, two period OLG. Basic models II: A leisure-consumption OLG with production by labor only. Basic models III: OLG with production by labor and capital. The classical case and the «Samuelson case». Different types of intertemporal equilibria : stationary, periodic, complex (chaotic). Implicitly defined intertemporal equilibria: the problem of «backward dynamics» in OLG models. Stochastic elements in OLG models: some introductory concepts and a general result. A pure exchange, three-period OLG with random perturbations. The relation between OLG and the atemporal model of general equilibrium. Some questions of welfare economics arising in OLG models.

Topics in Industrial Organization

Period: November 11 - December 12, 2014 (Tue. 14:30-16:30, Fri.
14-16)

Credits: 6

Instructors: 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 9 - March 20, 2015

Credits: 6

Instructors: 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 30 - May 8, 2015

Credits: 6

Instructors: 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 or LUISS)

Review courses

Microeconomics Review Course (EIEF)

Period: September 22 - October 24, 2014

Credits: 6

Instructor: Terlizzese

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

Macroeconomics Review Course (EIEF)

Period: September 22 - October 24, 2014

Credits: 6

Instructor: 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 (EIEF)

Period: September 22 - October 24, 2014

Credits: 6

Instructors: Lippi, 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 (EIEF)

Period: September 22 - October 24, 2014

Credits: 6

Instructors: Scarlatti, 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 (EIEF)

Period: November 10 - December 19, 2014

Credits: 6

Instructor: Pozzi

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

Empirical Political Economy (EIEF)

Period: Spring (TBA) 2015

Credits: 6

Instructor: Gagliarducci

Theoretical Political Economy (EIEF)

Period: Spring (TBA) 2015

Credits: 6

Instructor: Battaglini

Economics of Networks (EIEF)

Period: Spring (TBA) 2015

Credits: 6

Instructors: Patacchini

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

Behavioral and Experimental Economics (LUISS)

Period: February 16 - May 16, 2015

Credits: 12

Instructor: Rustrom

The aim of this course is both to present the main conceptual issues and discuss the basic principles of this methodology and to make students able to cope with the concrete procedures for successful experimentation (picking interesting and important problems, creating a laboratory environment, choosing and motivating subjects, designing and conducting experiments, collecting and analyzing the data and reporting the results). This will be implemented through the analysis of particular topics of special interest: decision making under risk and uncertainty, markets, games, groups and social choices, behavioral finance. Since the ultimate goal is to design and run economic experiments, we shall complement the review of the existing experimental literature with a special focus on methodological and design issues.

Macroeconomics

Monetary Economics: Theory of Money (EIEF)

Period: November 10 - December 19, 2014

Credits: 6

Instructors: 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: Fluctuations (EIEF)

Period: February 9 - March 20, 2015

Credits: 6

Instructors: Paciello

SS models of inaction applied to price setting. Models of price rigidity due to information constraints. Optimal monetary policy.

Monetary Economics: Empirical Macro (EIEF)

Period: February 9 - March 20, 2015

Credits: 6

Instructors: L'Hullier

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

Macroeconomic Theory: Policy (EIEF)

Period: March 30 - May 8, 2015

Credits: 6

Instructors: Piguillem

Optimal monetary and fiscal policy. Ramsey problems. Policy at the zero lower bound. Jobless recoveries. Debt deleveraging.

Econometrics

Latent Variable Models (EIEF)

Period: November 10 - December 19, 2014

Credits: 6

Instructors: 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 (EIEF)

Period: November 10 - December 19, 2014

Credits: 6

Instructors: 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 (EIEF)

Period: February 9 - March 20, 2015

Credits: 6

Instructors: Leorato

History of the bootstrap. The pioneering paper by B. Efron. The bootstrap principle. Consistency of the bootstrap. Remedies to inconsistency: subsampling. Double bootstrap. Edgeworth expansions. Asymptotic refinements. Bootstrap confidence intervals, rejection region. The jackknife and other resampling methods. Special issues: dependent data, kernel estimation, linear models non-smooth statistics, cube-root asymptotic statistics.

Topics in VAR Modeling (EIEF)

Period: February 9 - March 20, 2015

Credits: 6

Instructors: Franchi

Representation, inference and interpretation in stationary and co-integrated systems. DSGE models and common cyclical features in VARs.

Finite Mixture Models (EIEF)

Period: March 30 - May 8, 2015

Credits: 6

Instructors: 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 (EIEF)

Period: March 30 - May 8, 2015

Credits: 6

Instructors: Ragusa

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

Finance

Corporate Finance (EIEF)

Period: November 10 - December 19, 2014

Credits: 6

Instructors: 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 (EIEF)

Period: November 10 - December 19, 2014

Credits: 6

Instructors: 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.

Theoretical Asset Pricing (EIEF)

Period: November 10 - December 19, 2014

Credits: 6

Instructors: 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.

Household Finance (EIEF)

Period: February 9 - March 20, 2015

Credits: 6

Instructors: 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.

Second-Year Courses

Research for Thesis Writing

Credits: 48

DEF Seminar series

Credits: 6

EIEF Seminar series

Credits: 6

Reading Group

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

Credits: 6

Visiting Student in Foreign Institution

Credits: 6