

Study Plan

School: Institute for Research and Advanced Training

Degree: Doctorate

Course: Economics (cód. 439)

Alternative Plan PhD Course

1st Year - 1st Semester Alternative Plan PhD Course

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
	Microeconomic Analysis I	Economy	7.5	Semester	195
ECN10311D					
	Macroeconomic Analysis	Economy	7.5	Semester	196
ECN10312D					
	Econometrics	Economy	7.5	Semester	195
ECN10313D					
	Seminar on Research Methodologies	Economy	7.5	Semester	194
ECN10314D					

1st Year - 2nd Semester Alternative Plan PhD Course Component code | Name | Scientific Area Field | ECTS | Duration |

omponent code	Name	Scientific Area Field	ECTS	Duration		Hours		
roup of Options								
Component code	:	Name	:		Scientific Area Field	ECTS	Duration	Hours
ECN10315D	Dyna	mic Economics			Economy	7.5	Semester	196
ECN10316D	Econo	omic Growth			Economy	7.5	Semester	194
	Macr	oeconometrics			Economy	7.5	Semester	195
ECN10317D								
roup of Options								
		Name	2		Scientific Area Field	ECTS	Duration	Hours
roup of Options		Name trial Economics	2		Scientific Area Field Economy	ECTS 7.5	Duration Semester	Hours 195
roup of Options Component code	Indus		2					



1st Year - 2nd Semester Alternative Plan PhD Course

mponent code	Name	Scientific Area Field	ECTS	Duration		Hours		
* TRANSLATE N	1E:Grupo	I, II e III ***		•				
Component code	Name	Scientific Area Field	I ECTS	Duration		Hours		
Group of Options								
Component cod	le	Name	9		Scientific Area Field	ECTS	Duration	Hours
	Dyna	amic Economics		-	Economy	7.5	Semester	196
ECN10315D								
	Econ	omic Growth			Economy	7.5	Semester	194
ECN10316D								
	Mac	roeconometrics			Economy	7.5	Semester	195
ECN10317D								
	,							
Group of Options								
Component cod	le 📗	Name	a		Scientific Area Field	ECTS	Duration	Hours

Group of Options					
Component code	Name	Scientific Area Field	ECTS	Duration	Hours
	Industrial Economics	Economy	7.5	Semester	195
ECN10318D					
	Labour Economics	Economy	7.5	Semester	194
ECN10319D					
	Microeconometrics	Economy	7.5	Semester	195
ECN10320D					

Group of Options

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
	Economic and Social Development	Economy	7.5	Semester	196
ECN07078D					
	Regional Economics	Economy	7.5	Semester	195
ECN10321D	_				
	Financial Economics	Economy	7.5	Semester	194
ECN10322D					
	Monetary Economics and Monetary Policy	Economy	7.5	Semester	194
ECN10323D					
	International Economics	Economy	7.5	Semester	194
ECN10324D					
	Business Economics	Economy	7.5	Semester	195
ECN10325D					

*** TRANSLATE ME:Optativa livre ***

2nd Year - 3rd Semester Alternative Plan PhD Course

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					

2nd Year - 4th Semester Alternative Plan PhD Course

/ incommutative i fam i	Alternative Figure 1 ib Course							
Component code	Name	Scientific Area Field	ECTS	Duration	Hours			
Thesis								

3rd Year - 5th Semester Alternative Plan PhD Course

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					



3rd Year - 6th Semester Alternative Plan PhD Course

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					

4th Year - 7th Semester

Alternative Plan PhD Course

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					

4th Year - 8th Semester

Alternative Plan PhD Course

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					

Alternative Plan Tutorial Plan

1st Year - 1st Semester

Alternative Plan Tutorial Plan

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
	Seminar on Research Methodologies	Economy	7.5	Semester	194
ECN10314D					
Thesis					

1st Year - 2nd Semester

Alternative Plan Tutorial Plan

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					

2nd Year - 3rd Semester

Alternative Plan Tutorial Plan

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					

2nd Year - 4th Semester

Alternative Plan Tutorial Plan

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis	-				

3rd Year - 5th Semester

Alternative Plan Tutorial Plan

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					

3rd Year - 6th Semester

Alternative Plan Tutorial Plan

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					



4th Year - 7th Semester Alternative Plan Tutorial Plan

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					

4th Year - 8th Semester Alternative Plan Tutorial Plan

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					

Conditions for obtaining the Degree:

*** TRANSLATE ME: PLANO COM CURSO DE DOUTORAMENTO: $\{\ \ \}$ newline

{ \ } newline

Para aprovação na componente curricular neste plano deste programa de doutoramento é necessário a aprovação (através de avaliação ou creditação) das seguintes unidades curriculares: { \ } newline

 $\{\, \backslash \,\}\, \mathsf{newline}$

 1^{O} Semestre: $\{\,\backslash\,\}$ newline

4 UC Obrigatórias num total de 30 ECTS { \ } newline

 $\{\,\setminus\,\}$ newline

 $2.^{\scriptsize 0} \ {\sf Semestre:} \{\, \backslash \, \} \, {\sf newline}$

2 UC optativas dos Grupos I ou 2 UC optativas do Grupo II num total de 15 ECTS $\{\ \ \}$ newline

1 UC optativa dos Grupos I, II ou III num total de 7.5 ECTS $\{\,\setminus\,\}$ newline

1 UC optativa dos Grupos I, II, III ou optativa livre num total de 7.5 ECTS $\{ \setminus \}$ newline

 $\{ \setminus \}$ newline

Para obtenção do grau, é necessário a aprovação da Tese com o total de 180 ECTS no 2° , 3° e 4° Ano $\{\,\setminus\,\}$ newline

 $\{\,\setminus\,\}$ newline

 ${\sf PLANO\ TUTORIAL}; \{\,\backslash\,\}\, {\sf newline}$

{ \ } newline

Para obtenção do grau, é necessário a aprovação na UC do $1^{\rm O}$ semestre com 7,5 ECTS e na Tese ***

Program Contents



Microeconomic Analysis I (ECN10311D)

- 1. Consumer Theory
- a. Choices, preferences and utility. Revealed preference.
- b. Consumer's problem
- c. Indirect utility function, expenditure function and demand functions
- d. Duality and integrability
- e. Decision under uncertainty
- 2. Producer theory
- a. Production sets
- b. Profit maximization, supply function and profit function
- c. Cost minimization, conditioned demand and cost function
- d. Duality in production
- 3. Decision under uncertainty
- a. Expected utility theory
- b. Monetary lotteries and risk aversion
- c. First order and second order stochastic dominance
- 4. General equilibrium and welfare
- a. General equilibrium under perfect competition
- b. Pareto optimality and fundamental welfare theorems
- 5. Game theory
- a. Static games of complete information
- b. Dynamic games of complete information
- c. Static games of incomplete information
- d. Dynamic games of incomplete information
- 6. Asymmetric information problems
- a. Incentives and moral hazard
- b. Adverse selection
- c. Signaling

Back

Macroeconomic Analysis (ECN10312D)

- 1-Demand management policies in an open-economy framework
- 2- Government deficit and public debt
- 3- Labor market, the Phillips curve debate and the aggregate supply dynamics
- 4- The complete model: demand and supply economic policies
- 5- The business cycles: the New Keynesian Economics and the Theory of Real Business Cycles
- 6- The long run: from neoclassical growth models to endogenous growth theory
- 7- New frontiers for Macroeconomics



Econometrics (ECN10313D)

- I. Topics on Linear Regression: Estimation and Specification Analysis; Endogenous Regressors (Instrumental Variables; Generalized Method of Moments).
- II. Discrete and Limited Dependent Variable Models: Discrete Choice Models; Multinomial Models, Ordered choice Models; Count Data Models; Fractional Regression Models...
- III. Panel Data Models: Alternative Models; Specification Analysis.
- IV. Time Series Models: ARMA Processes; Nonstationarity Series; Unit roots; Cointegration; Vector Autoregressive Models; ARCH models.
- V. Introduction to Simulation Methods: Monte Carlo; Bootstrap.

Back

Seminar on Research Methodologies (ECN10314D)

- 1 The research environment of the Doctoral Program in Economics:
- 2 Identification of relevant research in Economics / evaluation of scientific production
- 3 Direct contact with research results
- 3.1 Attendance of seminars and conferences
- 3.2 Meetings with researchers from the different areas involved in the program
- 4 Research planning
- 4.1 Identification of the student's research area
- 4.2 Research, selection and first analysis of relevant literature
- 4.3 Pioneering references
- 4.4 Data sources
- 4.5 Identification of possible supervisors
- 5 The process of scientific writing
- 5.1 The structure of an article
- 5.2 Formal and stylistic aspects
- 6 The thesis project
- 6.1 Research questions identification of topics likely to originate relevant scientific output
- 6.2 Bibliographic review
- 6.3 Drafting of the project

Back

Dynamic Economics (ECN10315D)

- 1. Time in Economics: Discrete and Continuous. Stability conditions and convergence. Examples: The debt dynamics, adaptive and rational expectations
- 2. Dynamic systems in continuous time. Scalar and planar differential equations, Linear and nonlinear; economic applications. Examples: The wage equation, Hysteresis model, the Lucas dynamic supply curve
- The intergenerational business cycles models (discrete time): the Banchard-Cass-Yaari?s overlapping generations model , the Diamond-Samuelson model, etc.
- 3. Deterministic optimal control. Definition and versions of the problem. First order necessary conditions: the Pontryiagin principle, the principle of dynamic programming and the equation of Hamilton-Jacobi-Bellman. Second order conditions and sufficient conditions, necessary and sufficient conditions. Transversality conditions. The modified Hamiltonian dynamical system: stability and comparative dynamics. Economic applications: economic growth models without natural resources



Economic Growth (ECN10316D)

- I First-Generation Endogenous Growth Models
- II Second-Generation Endogenous Growth Models
- III Third-Generation Endogenous Growth Models
- IV Fourth-Generation Endogenous Growth Models
- V Optimality of Investments in R&D in second- to fourth Generation Models
- VI Unified Growth Theories
- VII Open Economy and Economic Growth Models
- VIII Sustainability and Economic Growth
- IX Endogenous growth and wage inequality
- X Economic Growth Empirics

Back

Macroeconometrics (ECN10317D)

- 1. Univariate Time Series Models.
- 2. Multivariate Time Series Models.
- 3. ARCH and GARCH Models.
- 4. Multi-Factor Models.
- 5. Models for Long Memory Stochastic Processes.
- 6. Simulation Methods.
- 7. Empirical Examples.

Back

Industrial Economics (ECN10318D)

- 1. Monopoly Price Discrimination
- 2. Relationship between Industrial Concentration and Firm Performance
- 3. Oligopoly Models and Cartel Theory
- 4. Product Differentiation and Advertising
- 5. Vertical Integration
- 6. Innovation, R&D and Patents
- 7. Price Regulation

Back

Labour Economics (ECN10319D)

Labour Supply and Labour Demand. Competitive equilibrium and compensating wage differentials. Education and Human Capital. Wage and income inequality. Labour market discrimination. Labour mobility. Contracts and Work incentives. Collective Bargaining. Unemployment. Labour Market Policies.



Microeconometrics (ECN10320D)

Introduction: Microeconometric data, Data Issues, Specification Analysis

Advanced topics in Models for Limited and discrete dependent variables,: Tobit Models; Two-part models; Selectivity Models.

Advanced topics in Panel Data Models: Dynamic Models, Nonlinear Models.

Duration Analysis: Parametric and semiparametric models. Continous time models and discrete time models.

Spatial Econometrics: Spatial dependence and spatial heterogeneity. Spatial autocorrelation statistics. Spatial regression models.

Policy Evaluation Methods: Natural and Social Experiences, Differences in Differences Methods, Matching.



Economic and Social Development (ECN07078D)

MASTERS and DOCTORATE IN ECONOMICS{\}newline UNIVERSITY OF ÉVORA{\}newline

PROGRAM 2011-2012

ECONOMIC AND SOCIAL DEVELOPMENT

Assistant Professor, PhD: Miguel Rocha de Sousa{\}newline

Gab. 256, email: mrsousa@uevora.pt or miguelrochasousa@uevora.pt

 $\{ \setminus \}$ newline

PROGRAM{\}newline

1.Introduction: Definition of economic development. Poverty and social exclusion. The indices of the World Bank (other HDI, GPI). Welfare relative and absolute. Equity and efficiency. Poverty, malnutrition and famine. 2nd. Analysis of economic behavior in developing 2i) theories: Households and development. The land market: a key issue. Credit and rural markets: micro-credit and fragmented markets. Human capital and income distribution. Reducing poverty: efficiency and equity. Technical progress in learning and development. Environment 2ii) empirical applications: Human capital. Property rights and incentives. The case of African development. 3rd. Some examples of public policy development. The role of the state, the market and the development of International Organizations. 4th. The role of institutions in economic development process: and Freedoms guarantees as constituent elements of economic development. The political and economic factor in development. The theory of the firm, transaction costs and endogenous development. Other approaches institutionalists development. Culture and development. Limitations of the economic analysis of development

Detailed Program{\}newline

One. Introduction: Definition of economic development:{\}newline

Poverty and social exclusion. The indices of the World Bank. Welfare relative and absolute. Equity and efficiency. Poverty and malnutrition. Poverty and Famines. {\} newline

Bib: G, R, Cap.2, 6,7,8, S1

2nd. Topics in Microeconomics development{\}newline

2i) micro Theories:{\}newline

Households and development BU1, Cap.2{\}newline

The land market: a key issue. BA caps 11,12, BU2, Cap.2, 3, $12\{\}$ newline Credit and rural markets: micro-credit and fragmented markets. $\{\}$ newline

BA caps.13, 14 BE cap.15, BU1, and caps.6 7, Y1, Y2{\}newline

Human capital and income distribution. BU1, cap.10, BU2, cap.5{\}newline

Reducing poverty: efficiency and equity. BU1, cap.11 $\{\}$ newline

Technical progress in learning and development. BU1, Chap.12{\}newline

Development and Environment. BU1, ch. 13, G, cap.15

2ii) Applications micro-empirical {\} newline

The human capital. BU3, caps.2, $11\{\$ newline

Property rights and incentives. BU3, Chap.12{\}newline

The case of African development. TR

3rd. Some examples of public policy development{\}newline

3.1. Taxes and fiscal theory BE cap. $4,5\{\}$ newline

3.2. International trade: free trade, and development practices. $\{\setminus\}$ newline

BE caps.1, 2,3

 $\{ \setminus \}$ newline

4th. The role of institutions in economic development process{\}newline

Freedoms and guarantees as constituent elements of economic development. Accountability. The political and economic factor in development. S2, S3.{\}newline

The theory of the firm, transaction costs and endogenous development{\}newline

YA, chaps. $8,9,10\{\$ newline

The neo-institutionalist approach to economic development. N1, N2 $\{\}$ newline

Limitations of the economic analysis of development BA, cap.15, BR



Regional Economics (ECN10321D)

1. Introduction. 2. Advanced Topics in Planning and Territorial Development. 3. Advanced Topics in Urban Economics. 4. Models of Spatial Analysis. 5. Planning and Public Policy. 6. Conclusions.

Back

Financial Economics (ECN10322D)

- 1. Portfolio theory: The problem of selection of investment portfolios, the efficient frontier and investor choice under uncertainty.
- 2. Equilibrium models of capital markets: CAPM Capital Asset Pricing Model, Model Market Index; APT Arbitrage Pricing Theory; efficiency of markets, empirical tests of equilibrium models.
- 3. Analysis and evaluation of action: models of dividends, the approach of the discounted free cash flows, relative valuation.
- 4. Rating of bonds; temporal structure of interest rates: definition, direct and indirect methods of estimation, equilibrium models and arbitrage, risk management, interest rate, hedging strategies and immunization simple-factor and multifactor models, risk credit
- 5. Valuation of financial derivatives, discrete time models (binomial model), replicating and Portfolio Risk neutral valuation, continuous time models, stochastic processes, PDE fundamental dynamic hedging

Rack

Monetary Economics and Monetary Policy (ECN10323D)

Money: nature and functions; the processes of money supply and demand; objectives and instruments of monetary policy; The theory of interest rates; the foreign exchange market and the international monetary system; The coordination of monetary and fiscal policies; The new challenges of monetary policy and the functional redefinition of central banks.

Back

International Economics (ECN10324D)

- 1. The main trends of international trade and international investments;
- 2. Theoretical foundations of international specialization: from comparative advantage to competitive advantage;
- 3. Intra-industrial trade: typology, measurement and determinants;
- 4. Economic Geography Models: industrial location and international trade flows;
- 5. International trade in economic growth models;
- 6. Instruments of trade policy and their impact on trade;
- 7. Strategic trade policy in the contexts of globalization and of regional integration;
- 8. The institutional dynamics of the International Trade System for goods and services;
- 9. Global Value Chains (CVG): a new dimension of globalization of production and trade
- 10. Multilateral Trade System and VCG: the new Agenda for Development
- 11. Determinants and impacts of foreign direct investments (FDI);

Back

Business Economics (ECN10325D)

- 1- Introduction to Energy Economics
- 2- Energy sources: non-renewables vs renewables
- 3- Economics of fossil fuels
- 4- Economics of renewables
- 5- Energy dependency, climate change, and energy policy
- 6- Regulation in the energy industry
- 7- Energy markets and electricity markets
- 8- Energy demand analysis
- 9- Energy consumption and economic growth
- 10- Energy elasticity
- 11- Economic analysis of Energy Investments
- 12- Security of supply and risk analysis