

# Study Plan

School:	Institute for Research and Advanced Training
Degree:	Doctorate
Course:	Economics (cód. 697)

# Alternative Plan \*\*\* TRANSLATE ME: Percurso com parte escolar \*\*\*

# 1st Year - 1st Semester

Alternative Plan \*\*\* TRANSLATE ME: Percurso com parte escolar \*\*\*

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 \*\*\* TRANSLATE ME: Percurso com parte escolar \*\*\*

Component code	Name	Scientific Area Field	ECTS	Duration	Hours			
Options 1								
Component code Name				Scientific Area Field	ECTS	Duration	Hours	
	Microeconometrics			Economy	7.5	Semester	195	
ECN10320D								
	Macro	Macroeconometrics			Economy	7.5	Semester	195
ECN10317D					_			

Component code	Name	Scientific Area Field	ECTS	Duration	Hour
	Economic Growth	Economy	7.5	Semester	194
ECN10316D					
	Economic and Social Development	Economy	7.5	Semester	196
ECN07078D					
	Business Economics	Economy	7.5	Semester	195
ECN10325D					
	Labour Economics	Economy	7.5	Semester	194
ECN10319D					
	Monetary Economics and Monetary Policy	Economy	7.5	Semester	194
ECN10323D					
	Financial Economics	Economy	7.5	Semester	194
ECN10322D					
	International Economics	Economy	7.5	Semester	194
ECN10324D					
	Regional Economics	Economy	7.5	Semester	195
ECN10321D					
Free option	•	· ·			



2nd Year - 3rd Semester

Alternative Plan *** TRANSLATE ME: Percurso com parte escolar ***								
Component code	Name	Scientific Area Field	ECTS	Duration	Hours			
Thesis								

2nd Year - 4th Semester

Alternative Plan *** TRANSLATE ME: Percurso com parte escolar ***								
Component code	Component code Name Scientific Area Field ECTS Duration Hours							
Thesis		-						

3rd Year - 5th Semester

Alternative Plan *** TRANSLATE ME: Percurso com parte escolar ***									
Component code	ponent code Name Scientific Area Field ECTS Duration Hours								
Thesis									

3rd Year - 6th Semester

Alternative Plan *** TRANSLATE ME: Percurso com parte escolar ***									
Component code	Component code Name Scientific Area Field ECTS Duration Hours								
Thesis									

4th Year - 7th Semester

Alternative Plan *** TRANSLATE ME: Percurso com parte escolar ***									
Component code	Component code Name Scientific Area Field ECTS Duration Hours								
Thesis									

4th Year - 8th Semester									
Alternative Plan *** TRANSLATE ME: Percurso com parte escolar ***									
Component code	Name	Scientific Area Field	ECTS	Duration	Hours				
Thesis									

Alternative Plan \*\*\* TRANSLATE ME: \*\*\*

#### 1st Year - 1st Semester

#### Alternative Plan \*\*\* TRANSLATE ME: \*\*\*

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 *** TRANSLATE ME: ***									
Component code	Name	Scientific Area Field	ECTS	Duration	Hours				
Thesis									

2nd Year - 3rd Semester

Alternative Plan \*\*\* TRANSLATE ME: \*\*\*

/					
Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					



# 2nd Year - 4th Semester Alternative Plan \*\*\* TRANSLATE ME: \*\*\* Component code Name Scientific Area Field ECTS Duration Thesis

Hours

 3rd Year - 5th Semester

 Alternative Plan \*\*\* TRANSLATE ME: \*\*\*

 Component code
 Name

 Scientific Area Field
 ECTS

 Duration
 Hours

 Thesis

3rd Year - 6th Semester Alternative Plan *** TRANSLATE ME: ***							
	Component code   Name   Scientific Area Field   ECTS   Duration   Hours						
Thesis							

4th Year - 7th Semester Alternative Plan *** TRANSLATE ME: ***					
Component code	e Name Scientific Area Field ECTS Duration Hours				
Thesis					

#### 4th Year - 8th Semester

Alternative Plan \*\*\* TRANSLATE ME: \*\*\*

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
$\{ \ \}$ newline
$1^{O}$ Semestre: {\}newline
4 UC Obrigatórias num total de 30 ECTS{\}newline
{\}newline
2.° Semestre:{\}newline
{\}newline
1 UC optativa dos Grupos 1, num total de 7.5 ECTS {\}newline
UC's optativas do Grupo 2, num total de 22.5 ECTS podendo uma delas ser do tipo Livre
{\}newline
Para obtenção do grau, é necessário a aprovação da Tese com o total de 180 ECTS no 2º, 3º e 4º Ano{\}newline
{\}newline
PLANO TUTORIAL:{\}newline
{\}newline
Para obtenção do grau, é necessário a aprovação na UC do 1º 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
- $\boldsymbol{6}$  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



# 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.

#### 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

# 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



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  $\{ \}$ newline  $\mathsf{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,  $11\{$ 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. {\}newline BE caps.1, 2,3  $\{ \}$ 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



# 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

# 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.

# Back

# 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

# 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



# 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

# 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.