

# Study Plan

**School:** School of Social Sciences

Degree: Bachelor

Course: Economics (cód. 200)

## 1st Year - 1st Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
	Principles of Microeconomics	Economy	6	Semester	156
ECN02314L					
	Financial Accounting I	Management	6	Semester	156
GES02282L					
	Mathematics Applied to Economics and Management I	Mathematics	6	Semester	156
MAT02312L					
	Applied Economics	Economy	6	Semester	156
ECN02350L					
	Academic Writing Skills	Languages and Li-	3	Semester	78
LLT02313L		terature			
	Topics in Numeric Tools	Informatics	3	Semester	78
INF02315L					

## 1st Year - 2nd Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
	Principles of Macroeconomics	Economy	6	Semester	156
ECN02319L					
	Introduction to Business Finnance	Management	6	Semester	156
GES02351L					
	Mathematics Applied to Economics and Management II	Mathematics	6	Semester	156
MAT02317L					
	Fundamental Notions of Law	Juridical Sciences	6	Semester	156
ECN02318L					

**Group of Options** 

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
	Introduction to Social Sciences	Sociology	6	Semester	156
SOC02320L					
	Entrepreneurship and Innovation	Management	6	Semester	156
GES02310L					

## 2nd Year - 3rd Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
	Microeconomics I	Economy	6	Semester	156
ECN02352L					
	Macroeconomics I	Economy	6	Semester	156
ECN02353L					
	Probability and Statistics	Mathematics	6	Semester	156
MAT02354L					
	Portuguese Economy	Economy	6	Semester	156
ECN02355L					
Group of Free Option	ons				



## 2nd Year - 4th Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
	Microeconomics II	Economy	6	Semester	156
ECN02356L					
	Macroeconomics II	Economy	6	Semester	156
ECN02357L					
	Econometrics I	Economy	6	Semester	156
ECN02358L					
	Public Economics and Finance	Economy	6	Semester	156
ECN02359L					
	History of Economic Thought	Economy	6	Semester	156
ECN02301L					

## 3rd Year - 5th Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
	International Economics	Economy	6	Semester	156
ECN02337L					
	Monetary Economics	Economy	6	Semester	156
ECN02360L					
	Econometrics II	Economy	6	Semester	156
ECN02361L					

**Group of Options** 

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
	Economic Decision Analysis	Economy	6	Semester	156
ECN02362L					
	Labor Law	Juridical Sciences	6	Semester	156
ECN02295L					
	Environmental and Natural Resource Economics	Economy	6	Semester	156
ECN02363L					
	Development Economics	Economy	6	Semester	156
ECN02304L					

## 3rd Year - 6th Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
	Industrial Economics	Economy	6	Semester	156
ECN02364L					
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## **Group of Options**

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
	Economic Analysis of Investment Projects	Economy	6	Semester	156
ECN02365L					
	Economics of European Integration	Economy	6	Semester	156
ECN02299L					
	Financial Economics	Economy	6	Semester	156
ECN02344L					
	Regional Economics	Economy	6	Semester	156
ECN02307L					
	Agricultural Policy and Development	Economy	6	Semester	156
ECN02366L					
	Economic Policy	Economy	6	Semester	156
ECN02367L					



## Conditions for obtaining the Degree:

\*\*\* TRANSLATE ME: Economia

Para obtenção do grau de licenciado em Economia é necessário obter aprovação a 132 ECTS em unidades de curriculares obrigatórias e 48 ECTS em unidades curriculares optativas distribuídas da seguinte forma:

1º Ano

1º Semestre:

6 UC Obrigatórias num total de 30 ECTS

20 Semestre

4 UC Obrigatórias num total de 24 ECTS

1 UC Propedêutica alternativa num total de 6 ECTS

2<sup>o</sup> Ano

3<sup>o</sup> Semestre

4 UC Obrigatórias num total de 24 ECTS

1 UC Optativa livre (dos planos de estudo dos 1ºs ciclos de Gestão, Relações Internacionais ou Sociologia) num total de 6 ECTS

40 Semestre

5 UC Obrigatórias num total de 30 ECTS

3º Ano

50 Semestre

3 UC Obrigatórias num total de 18 ECTS

2 UC Optativas do respectivo semestre num total de 12 ECTS

60 Semestre

1 UC Obrigatórias num total de 6 ECTS

4 UC Optativas do respectivo semestre num total de 24 ECTS \*\*\*

**Program Contents** 



## Principles of Microeconomics (ECN02314L)

- 1. Introduction
- 1.1 Economics as a science
- 1.2 The economic problem: scarcity and choice
- 1.3 Society's technological possibilities
- 1.4 Review of mathematical tools and graphical analysis
- 1.5 The economic circuit
- 2. Model of Supply and Demand Introduction
- 2.1 Market
- 2.2 Demand curve
- 2.3 Supply curve
- 2.4 Joint analysis of supply and demand
- 2.5 Government intervention in the market
- 2.6 Consumer surplus and producer surplus
- 3. Consumer behaviour
- 3.1 Utility and preferences
- 3.2 Static equilibrium of the consumer
- 3.3 Changes in income and prices: impact on consumer choices
- 4 Firm's production and organization
- 4.1 Basic concepts
- 4.2 Production
- 4.3 Costs
- 4.4 Firm's decision: optimal combination of factors
- 5. Markets
- 5.1 Perfect Competition
- 5.2 Monopoly

## Back

## Financial Accounting I (GES02282L)

- 1. Introduction
- 2. Fundamental Concepts
- 3. Current transactions
- 4. Inventories and biological assets
- 5. Non-current transactions
- 6. Financial reporting

### Back

Mathematics Applied to Economics and Management I (MAT02312L)

### Back

Applied Economics (ECN02350L)



## Academic Writing Skills (LLT02313L)

### Back

## Topics in Numeric Tools (INF02315L)

- 1. Fundamentals of spreadsheet environment
- 1.1. Main features
- 1.2. Main areas of application
- 1.3. Spreadsheet organization
- 1.4. Data integration
- 1.5. Using application's help system
- 2. Worksheet organization
- 2.1. Worksheet, cell and range name management
- 2.2. Insert, move, copy, and delete cells, rows and columns
- 2.3. Cell and range reference
- 2.4. Range definition
- 3. Formulas and Functions
- 3.1. Operators and conditions
- 3.2. Formulas classes
- 3.3. Worksheet functions
- 3.4. Natural language formulas
- 3.5. Functions types
- 4. Charts
- 4.1. Creation
- 4.2. Formatting and modifying charts
- 4.3. Work with embedded charts
- 5. Business intelligence and PivotTables
- 5.1. Data analysis
- 5.2. Create, modify and format pivot table report

### Back

## Principles of Macroeconomics (ECN02319L)

## Back

## Introduction to Business Finnance (GES02351L)

- 1. Introduction
- 2. The Role of Financial Markets
- 3. Financial Diagnostic
- 4. Fundamental Concepts of Financial Management
- 5. Analysis of Investment Projects
- 6. Study of Financing Mix (Funding Sources)



## Mathematics Applied to Economics and Management II (MAT02317L)

- 1. Integral Calculus in R (indefinite integral, techniques of integration, Riemann integral, geometric interpretation, integration techniques).
- 2. Comparative-Static analysis with several variables (implicit dependence, differential, point elasticity, total differentials, total derivatives, implicit function theorem, application to the comparative-static analysis).
- 3. Optimization one choice variable (objective functions, choice variables, extreme values, stationary points, characterization of extreme values, convexity, concavity, profit and tax revenue maximization, derivatives of various orders, Taylor polynomials).
- 4. Optimization several choice variables (second order partial derivatives, extreme values of a function of two variables, quadratic forms, objective functions with more than two variables, economic example: multiproduct firm).
- 5. Optimization with constraints (constraints, Lagrange multipliers, bordered Hessian, homogeneity, Cobb-Douglas and CES functions).

### Back

## Fundamental Notions of Law (ECN02318L)

#### Back

## Introduction to Social Sciences (SOC02320L)

- I: The problem of knowledge and social sciences
- 1. Preliminary questions of Social sciences
- 2. The meaning of social: social facts and objectivity in social sciences
- 3. Classification of social sciences and interdisciplinarity: borders, complementarities and interceptions
- II. Basic concepts of social analysis
- 4. The identification of the social: analysis, understanding and explanation
- 5. Social relations: solidarity and sociability
- 6. The individual and collective: social interaction and group phenomena
- 7. Other methodological considerations about observation and social facts analysis
- III: Contemporary problems of social sciences
- 8. Dilemmas, problems and trends
- 9. Exemplifications of the applicability of the social sciences

## Back

## **Entrepreneurship and Innovation (GES02310L)**

Module 1 – Introduction to Entrepreneurship and Innovation

- a. Definitions and concepts of Entrepreneurship
- b. Profile and characteristics of entrepreneurs
- c. Social entrepreneurship and intrapreneurship
- d. What is innovation? Types of innovation
- d. Dynamics of innovation

Module 2 - Conception and Structuring business ideas

- a. Process and techniques of generating ideas
- b. Design Thinking tool
- c. Evaluation of business ideas
- d. The process of creating a business idea and firm
- e. Simulation games- from ideas to business formation

### Back

## Microeconomics I (ECN02352L)



## Macroeconomics I (ECN02353L)

### Back

### Probability and Statistics (MAT02354L)

Probabilities and Conditional Probabilities.

One and two-dimensional random variables (discrete and continuous).

Moments. Moment and probability generating functions.

Main probability distributions.

Point estimation (moment and maximum likelihood estimation methods and properties of estimators).

Confidence intervals for one and two populations.

Hypothesis tests for one and two populations.

Nonparametric alternatives for one and two populations.

### Back

Portuguese Economy (ECN02355L)

### Back

Microeconomics II (ECN02356L)

### Rack

Macroeconomics II (ECN02357L)

## Back

### Econometrics I (ECN02358L)

THE SIMPLE REGRESSION LINEAR MODEL WITH CROSS-SECTIONAL DATA: Specification; Estimation; Expected Values, Variances and Properties of the Estimators.

MULTIPLE REGRESSION ANALYSIS WITH CROSS SECTIONAL DATA: Specification; Estimation; Functional Form and Transformation of Variables; Effects of Changing the Unit of Measurement; Expected Values, Variances and Properties of the Estimators; Multicolinearity; Inference; Prediction.

OTHER TOPICS OF LINEAR REGRESSION: Specification Analysis; Qualitative Regressors; Topics on Assymptotic Theory.

HETEROSKEDASTICITY: Properties of the Estimators; Estimation in the Presence of Heteroskedasticity, Heteroskedasticity Tests.



## Public Economics and Finance (ECN02359L)

- 1. INTRODUCTION
- 1.1. Object of Study, Justification and Approaches
- 1.2. The Economic Functions of the State
- 2. PUBLIC INTERVENTION
- 2.1. The Foundations and Objectives
- 2.2. Public Intervention for Efficiency Reasons
- 2.2.1. The public goods
- 2.2.2. The externalities
- 2.3. Public Intervention for Equity Reasons
- 2.3.1. Income distribution criteria
- 3. THE COLLECTIVE CHOICE
- 3.1. The Problem of Choice and the Types of Rules
- 3.2. Analysis of some types of voting
- 4. PUBLIC EXPENDITURE
- 4.1. Definition, Categories and Causes
- 4.2. Evaluation
- 5. PUBLIC REVENUE
- 5.1. Definition and Categories
- 5.2. Taxation, Efficiency and Equity
- 5.3. Public debt
- 6. BUDGETARY POLICY
- 6.1. Introduction
- 6.2. National Budget Policy and in the European Union
- 7. PUBLIC FINANCE IN PORTUGAL
- 7.1. The Public Sector
- 7.2. The State Budget

### Back

## History of Economic Thought (ECN02301L)

### Back

## International Economics (ECN02337L)

- The International Economy in the context of the global economy: characterization of the Globalization process in view of the international mobility of products, services and production factors.
- Trends and determinants of the globalization of production: temporal dynamics of trade and factors of production movements in the international context.
- Classical and neoclassical theories of international trade: Comparative Advantage in models with technological and factorial differences
- Modern theories of international trade, in the context of imperfect competition

Ter Porter's model of nations' competitive advantages

- Introductory approach to economic geography models based on Krugman's approach
- The economics of Trade Policy and the institutional framework of international trade
- The economics of international factor mobility: Foreign Direct Investment and international migration



- Monetary Economics (ECN02360L) 1. CURRENCY: HISTORY, DEFINITION AND MEASUREMENT{\}newline  $\{ \setminus \}$  newline 1.1. The currency and financial system $\{\}$  newline {\}newline 1.2. Evolution of forms and monetary systems $\{\}$  newline  $\{ \setminus \}$  newline 1.3. Functional definition of money $\{\\}$  newline  $\{ \setminus \}$  newline 1.4. Statistical definition : monetary aggregates{\}newline {\}newline 2 . The money supply $\{\}$  newline
- {\}newline
- 2.1. The Monetary Creation $\{\}$  newline
- $\{ \setminus \}$  newline
- 2.2. The Monetary Control Creation{\}newline
- $\{ \setminus \}$  newline
- 3 . A MONEY DEMAND{\}newline
- $\{ \setminus \}$  newline
- 3.1. Classical perspective : quantitative relationship and dichotomous model {\}newline
- $\{ \setminus \}$  newline
- 3.2. Keynesian Perspective : currency ratio interest rate{\}newline
- {\}newline
- 3.3. Modern monetary theory and its influence on the conduct of economic policy $\{\\}$  newline {\}newline
- 4 . MONETARY POLICY{\}newline
- {\}newline
- 4.1. The transmission mechanism of monetary policy $\{\$  newline
- $\{ \setminus \}$  newline
- 4.2. The monetary policy strategy of the ECB $\{\}$ newline
- {\}newline
- 4.3. Rules and reaction functions of monetary policy{\}newline
- $\{ \setminus \}$  newline
- 5 . The INTERNATIONAL MONETARY SYSTEM  $\{\ \}$  newline
- {\}newline
- 5.1. The foreign exchange market  $\{\}$  newline
- $\{ \setminus \}$  newline
- 5.2. Supervision of SMI{\}newline
- $\{ \setminus \}$  newline
- 5.3. exchange rate regimes{\}newline
- {\}newline
- 6. THEORY OF INTEREST RATES{\}newline
- {\}newline
- 6.1. The Fisher ratio and interest rate parities  $\{\}$  newline
- $\{ \setminus \}$  newline
- 6.2. Term Structure of Interest Rates



# Econometrics II (ECN02361L)

## BINARY CHOICE MODELS:

Linear probability model Maximum likelihood estimation Logit and probit models

## BASIC REGRESSION ANALYSIS WITH TIME SERIES DATA:

Types of models
Trends and seasonality
Stationary and nonstationary time series.

## AUTOCORRELATION AND HETEROSKEDASTICITY IN TIME SERIES REGRESSIONS:

Autocorrelation tests Generalized least squares Dynamically complete models Heteroskedasticity ARCH models

## DYNAMIC MODELS AND FORECASTING:

Infinite distributed lag model Stationarity and unit roots tests Spurious regression and cointegration Forecasting

### PANEL DATA MODELS:

Fixed effects model Random effects model

## INSTRUMENTAL VARIABLE REGRESSION:

Motivation: Omitted variables and measurement error

Estimation

Endogeneity test and overidentifying restrictions test

## SIMULTANEOUS EQUATION MODELS:

Reduced form model and structural model

The identification problem Two stage least squares



## **Economic Decision Analysis (ECN02362L)**

- 1. DECISION ANALYSIS UNDER CERTAINTY
- 1.1. The Case of One Single Decision Agent
- 1.1.1. Decision Theory
- 1.1.2. Economic Applications
- 1.2. The Case of One Single Decision Agent
- 1.2.1. Decision Theory
- 1.2.2. Economic Applications

### 2. DECISION ANALYSIS UNDER RISK

- 2.1. Decision Theory
- 2.2. Economic Applications
- 2.2.1. A political economics case
- 2.2.2. A budgetary policy case
- 2.2.3. A financial economics case

### 3. DECISION ANALYSIS UNDER UNCERTAINTY

- 3.1. Decision Theory
- 3.2. Economic Applications
- 3.2.1. An economic planning case

### Back

## Labor Law (ECN02295L)

### Rack

## **Environmental and Natural Resource Economics (ECN02363L)**

- 1. Natural Resource Economics
- 1.1 A brief review of fundamental economic concepts and economic decision criteria: Static versus dynamic efficiency. The role of the discount rate.
- 1.2 Introduction to optimal control theory with one state variable and one control variable.
- 1.3 Sustainable exploitation of renewable natural resources: the particular cases of fisheries and forests
- 1.4 Sustainable exploitation of non-renewable resources
- 1.5 The specific case of energy resources
- 2. Environmental Economics
- 2.1 Markets, Efficiency, externalities, property rights and common resources.
- 2.2 Environmental policy instruments: standards, taxes, subsidies and tradable permits.
- 2.3 The Economics of pollution control: the particular case of the European Union Emissions Trading System (EU ETS)
- 2.4 Valuing the environment: purposes, methods and benefits.
- 2.5 Sustainability and economic growth



## Development Economics (ECN02304L)

ECONOMIC DEVELOPMENT ERASMUS Programme Academic Year 2013/2014

Assistant Professor: Miguel Rocha de Sousa; Office: CES 256;

e-mail: mrsousa@uevora.pt or miguelrochasousa@gmail.com

Office Hours: Office 256 CES: 10h-13h on Tuesday or by appointment via email or in class.

### **DETAILED PROGRAMME**

## 1 A DEFINITION OF CONCEPTS OF DEVELOPMENT AND UNDERDEVELOPMENT

- 1.1 The concepts of Development and Underdevelopment
- 1.2 The Purpose of Development Economics
- 1.3 The Indicators
- 1.3.1 The monetary and economic indicators
- 1.3.2 The quality indicators
- 1.3.3 The search for a synthetic indicator
- 1.4 What are the indicators
- 1.4.1 Measure and neutrality
- 1.4.2 The necessity of the measure

### 2 THEORIES OF DEVELOPMENT AND UNDERDEVELOPMENT

- 2.1 The development as a linear process
- 2.1.1 Underdevelopment as a delay in Development
- 2.1.2 The growth stages of W. W. Rostow
- 2.1.3 Models for growth
- 2.2 The Development and structural change
- 2.2.1 The creative destruction of J. Schumpeter
- 2.2.2 The Latin American structuralism
- 2.2.3 The model A. Lewis
- 2.3 The Product Development and Underdevelopment
- 2.3.1 The dual society. The model of cumulative causation of G. Myrdal
- 2.3.2 Imperialism and colonialism
- 2.3.3 The neo-colonialism and unequal exchange
- 2.4 The Basic Needs Approach
- 2.4.1 Basic needs
- 2.4.2 The man at the center of the problem
- 2.4.3 The ethical question
- 2.5 The Neo-Classical approach
- 2.5.1 The classical model
- 2.5.2 A New Political Economy
- 2.5.3 Counter-revolution or 'apoloziging'
- 2.6 The Institutional Approach
- 2.6.1 Definition of institutions
- 2.6.2 The issue of cultural blockade
- 2.6.3 The nature of political regimes
- 2.7 The New Economic Geography
- 2.7.1 The role of natural conditions
- 2.7.2 The problem of interiority with J. Sachs



## Industrial Economics (ECN02364L)

- 1. Nature and object of Industrial Organization; Approaches to study Industrial Economics; Public policy and regulation.
- 2. Key questions on companies, markets and industries. Definition, objectives and classification of companies; Market definition and relevant market; Market versus industry; CAE; Structure and dynamics of the Portuguese industries.
- 3. Concept and benefits of competition; Market structures; Market failures and market power; Competitive forces.
- 4. Determinants of market structure; Market concentration; Barriers to competition; Product differentiation; Vertical integration.
- 5. Behavior and strategies of firms; Mergers and acquisitions, M&A and regulation; Interfirm cooperation; EU regulations on agreements between firms; Cartels and tacit collusion; R&D and innovation.

#### Back

**Economic Analysis of Investment Projects (ECN02365L)** 

### Back

**Economics of European Integration (ECN02299L)** 

### Back

### Financial Economics (ECN02344L)

The Intermediaries, Financial Markets and Products.

The Portuguese Financial System.

Interest Rate Theory: Parity and Term Structure.

Financial Investments and Risk: Default Risk and Financial Asset's Portfolio Management.

The Financial Instruments of Financial Risk's Management.

## Back

## Regional Economics (ECN02307L)

- 1. The variable space in economic analysis. The space and its scales. The space and its indicators analysis and planning. Region concept. The territory and its agents. The territory and its organization and hierarchy. The territory and its infrastructure and equipment. Political and administrative territorial structure. Factors dynamic economic territories. The assessment of potential territorial and sectoral.
- 2. The regional economic theory. The precursors. The economic base of export theory. The growth poles theory. Models of regional growth. Theories of endogenous and exogenous regional development. The new approaches and perspectives.
- 3. The spatial analysis methods and techniques.
- 4. The Portuguese system for regional policy and territorial planning. Regional planning in Portugal. The financial programming period 2014-2020.
- 5. The EU Cohesion Policy 2021-2027.

### Back

## Agricultural Policy and Development (ECN02366L)

- 1 Introduction
- 2 Production Theory specific characteristics of agricultural production
- 3 Consumer theory specific characteristics of agricultural products consumption
- 4 Agricultural products markets
- 5 Agricultural and rural development policies
- 6 Common Agricultural Policy



# Back Economic Policy (ECN02367L)