

# BACHELOR IN ECONOMICS SECOND YEAR 2010-2011

<b>Course</b>	<b>Microeconomics III</b>	<b>Code</b>	
<b>Module</b>	<b>Microeconomics</b>	<b>Area</b>	<b>Economic Analysis</b>
<b>Nature</b>	<b>Compulsory</b>		
<b>Credits</b>	6	<b>Attendance</b>	3,6
		<b>Non Attendance</b>	2,4
<b>Year</b>	<b>Second</b>	<b>Semester</b>	2º

## INSTRUCTORS, GROUPS, TIMETABLE

<b>Lecturer / Instructor</b>	<b>Group</b>	<b>Timetable (lectures)</b>	<b>Timetable (seminars)</b>
Rafael Salas	E	Th:9h-13;	F:13h-14:30h

### INSTRUCTORS

**Coordinator (group E):** Rafael Salas. Dept: Fundamentos del Análisis Económico I, e-mail: r.salas at ccee.ucm.es. Phone: 91-3942512

## SYNOPSIS

<b>BRIEF DESCRIPTION</b>
Theory of Production, Costs, and Analysis of Competitive and Non-competitive Markets
<b>PRE-REQUISITES</b>
None

## OBJETIVES

To get familiar with the methodology used in economic theory and with the models of economic behaviour and factors determining market prices. In particular, this subject focuses on the theory of production and costs and the analysis of competitive and non-competitive markets.

## COMPETENCES

General: CG1, CG2, CG3, CG4  
Cross-sectional: CT1, CT2, CT3  
Specific: CE3, CE6, CE8, CE9

## TOPICS COVERED (Syllabus)

Technology. Production Function.  
Cost Functions.  
Competitive Firm Supply.  
Competitive Markets Equilibrium.  
Non-Competitive Markets.

## TEACHING ACTIVITIES DISTRIBUTION

Theoretical lessons	% of Total Credits	35%
Practical lessons	% of Total Credits	10%
Other Activities	% of Total Credits	55%
Personalized & Group Tutoring: 10%, Assessment Activities: 5%, Individual & Group Homework Assignments: 15%, Hours to Study: 25%		

## ASSESSMENT

Exams	% Share of Final Grade	50 %
Final Exam 50%		
Other Activities	% Share of Final Grade	30%
Cases & Quizzes 30%		
Other activities	& Share of Final Grade	20%

Active participation in the classroom: 10%

Individual oral presentations: 10%

### EVALUATION CRITERIA

Fail, pass, grade B, grade A

## RESOURCES

### BOOK LIST

Nicholson, W. and Snyder, C. (2008): Microeconomics: Basic Principles and Applications. Tenth edition. Thomson.

Pindyck, R.S. and Rubinfeld, D.L. (2009): Microeconomícs. Pearson-Prentice-Hall.

### OTHER RESOURCES

## COURSE PLAN

### WEEKS AND CHAPTERS

#### **Week 1:**

Chapter 1. Production Functions

Technology and Production Functions. Isoquant Maps and the Marginal Rate of Technical Substitution. The Cobb-Douglas Production Function. Perfect Substitutes and Complementaries.

#### **Week 2:**

Chapter 1. Production Functions

Short-Run and Long-Run Production. Marginal Productivity: Returns to Scale. Exercises.

Chapter 2. Cost Functions

Cost-minimizing Choice. Cost Functions for Cobb-Douglas Production Function. Conditioned Factor Demand Functions. Expansion Path. Short-Run and Long-Run Cost Functions.

**Week 3:**

## Chapter 2. Cost Functions

Average and Marginal Cost Functions in the Short and Long Run. Properties of Cost Functions. Costs and Returns to Scale. U-Shaped Average Cost Functions. Examples under Cobb-Douglas Technology. Relationships between Short-run and Long-run Cost Functions.

**Week 4:**

## Chapter 2. Cost Functions

Exercises.

## Chapter 3: Competitive Firm Supply. Competitive Equilibrium

Price-Taking Firms and Profit Maximization. Short-Run and Long-Run Supply. Examples. Supply Functions under Cobb-Douglas Production Function. Supply Functions for U-Shaped Average Cost Functions.

**Week 5:**

Exercises. Exam of Chapters 1 and 2

**Week 6:**

## Chapter 3: Competitive Firm Supply. Competitive Equilibrium

Industry's Long-Run Competitive Equilibrium. Taxes and Subsidies Effects.

**Week 7:**

## Chapter 3: Competitive Firm Supply. Competitive Equilibrium

Short-Run and Long-Run Producer Surplus. Effects of Taxes and Price Policies over Social Welfare. Exercises.

**Week 8:**

## Chapter 4: Non-Competitive Markets: Monopoly

Monopoly and Market Power. Monopoly Equilibrium. Incidence of Taxes. Deadweight Loss. Multiplant Monopoly. Price Discrimination: Perfect and Third Degree Price Discrimination.

**Week 9:**

Chapter 4: Non-Competitive Markets: Monopoly  
Monopolistic Competition.

**Week 10:**

Exercises. Exam of Chapters 3 and 4

**Week 11:**

Chapter 5: Non-Competitive Markets: Oligopoly  
Oligopoly. Game Theory and Competitive Strategies. Nash Equilibrium.  
Dominant Strategies. Cooperative and Non-Cooperative Games. Cournot  
Duopoly Model. Reaction Curves and Equilibrium.

**Week 12:**

Chapter 5: Non-Competitive Markets: Oligopoly  
Stackelberg Duopoly Model. Comparisons between Stackelberg, Cournot and  
Multiplant Monopoly Equilibria.

**Week 13:**

Chapter 5: Non-Competitive Markets: Oligopoly  
Collusion solution. Instability of the collusion solution.

**Week 14:**

Chapter 5: Non-Competitive Markets: Oligopoly  
Bertrand Model of Pricing. Price Leadership Model.

**Week 15:**

Exercises. Exam of Chapter 5