Preliminary Mathematics

MASTER'S DEGREE IN ECONOMICS AND FINANCE

UNIVERSIDAD INTERNACIONAL MENÉNDEZ PELAYO

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This document can be used as reference documentation of this subject for the application for recognition of credits in other study programmes. For its full effect, it should be stamped by UIMP Student's Office.



GENERAL DATA

Brief description

Compulsory course (2 ECTS)

Name

Preliminary Mathematics

Code

101108

Academic year

2022-23

Degree

MASTER'S DEGREE IN ECONOMICS AND FINANCE

ECTS Credits

2

Type

MANDATORY

Duration

Cuatrimestral

Language

English

CONTENTS

Contents

- Preliminaries: Sets, functions, and methods of proof.
- Single-variable calculus.
- Linear algebra.

COMPETENCES

General competences

G1 - Demonstrate solid knowledge of economic theory, and the relevant economic, econometric and computational techniques.

Transversal competences

EP1 - Be aware of the main mathematical methods used in economics at graduate level.

Specific competences

EP1 - Be aware of the main mathematical methods used in economics at graduate level.

LEARNING PLAN

Training activities

- AF1.- Theory classes (20 hours)
- AF2.- Practical classes (10 hours)
- AF5.- Study of the course theoretic content (15 hours)
- AF6.- Practical exercise solving (5 hours)

Teaching methods

- Theory classes where the course program topics are developed.
- Practical lessons where pupils solve exercises distributed by the lecturer.

Learning outcomes

• Understanding the main mathematical methods used in undergraduate-level economy.

EVALUATION

Evaluation system

- SE1.- Exercises (from 0.05 to 0.3 weightning)
- SE2.- Presentations (from 0.05 to 0.15 weightning)
- SE4.- Exams (from 0.7 to 0.95 weightning)

FACULTY

Coordinator/s

Caruana Húder, Guillermo

PhD Economía en Boston University

Professor of Economics

Centro de Estudios Monetarios y Financieros (CEMFI)

Lecturers

Montenegro Zarama, Juan Mateo

SCHEDULE

Schedule

Compulsory course taught in the first semester.

BIBLIOGRAPHY AND LINKS

Bibliography

- 1. Simon, C. P. and Blume, L. (2010) Mathematics for Economists. W. W. Norton. New York.
- 2. Sydsaeter,K. and Hammond, P. (2006). Essential Mathematics for Economic Analysis. Second Edition. Prentice Hall, Harlow, England.
- 3. Sydsaeter, K. and Hammond, P. (2005). Further Mathematics for Economic Analysis. Prentice Hall, Harlow, England.