



Course Syllabus

Course Code	Course Title	ECTS Credits
ECON-390DL	Mathematics for Economics and Business	6
Prerequisites	Department	Semester
ECON-261DL, ECON-262DL, MATH-108DL	Economics and Finance	Fall/Spring
Type of Course	Field	Language of Instruction
Required	Economics	English
Level of Course	Lecturer(s)	Year of Study
1 st Cycle	Mr. Marios Christou	3 rd or 4 th
Mode of Delivery	Work Placement	Corequisites
Distance Learning	N/A	None

Course Objectives:

The main objectives of the course are to:

- Offer a good understanding of mathematical techniques used in Economics and Business.
- Introduce mathematical concepts as these can be used in economics and business.
- Develop mathematical skills for application in Economics and Business problems.

Learning Outcomes:

After completion of the course students are expected to be able to:

1. Demonstrate an understanding on how mathematical techniques are useful to approach economic theory and practice.
2. Understand how mathematical techniques are applied in economics and business and used as a decision making tools.
3. Perform an economic and business analysis using mathematical approaches.
4. Understand basic principles in Mathematics and their application in Economics and Business.
5. Practical application of problem solving.

Course Content:

1. Introduction to the Nature of Mathematical Economics
2. Static or Equilibrium Analysis (Linear and Non-Linear Models)
3. Comparative Static Analysis (Differentiation and its Use in Comparative Statics)
4. Comparative Static Analysis (Partial Differentiation)
5. Comparative Static Analysis (Integration)
6. Mathematics of Finance

Learning Activities and Teaching Methods:

Teaching material including PowerPoint presentations and additional readings; Synchronous meetings (WebEx); Asynchronous video presentations; Forums; Chat; Quizzes; Case studies and other suggested readings (scientific papers, journal articles); Formative and summative assessments.

Assessment Methods:

Assignments, Coursework Accounting, Final Examination

Required Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Mathematics for Economics and Business, 9 th Ed.	Ian Jacques	Prentice Hall	2018	978-1292191669

Recommended Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Using Mathematics in Economics, 2 nd Ed.	R, Thomas	Prentice Hall	1999	978-0201360509