

Teaching guide

IDENTIFICATION DETAILS

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|--------------------------------------|---|---------------|------|
| Degree: | Marketing | | |
| Field of Knowledge: | Social and Legal Science | | |
| Faculty/School: | Law, Business and Governance | | |
| Course: | MATHEMATICS APPLIED TO BUSINESS | | |
| Type: | Compulsory | ECTS credits: | 6 |
| Year: | 1 | Code: | 7612 |
| Teaching period: | First semester | | |
| Area: | Company | | |
| Module: | Business management and human development tools | | |
| Teaching type: | Classroom-based | | |
| Language: | Spanish | | |
| Total number of student study hours: | 150 | | |

SUBJECT DESCRIPTION

En el contexto empresarial actual las matemáticas constituyen uno de los principales instrumentos para analizar, describir y comprender fenómenos complejos. Es, por tanto, una herramienta de gran interés para el que desee obtener una visión objetiva y profunda de la realidad que le rodea.

Esta asignatura pretende que el alumno descubra la belleza de las matemáticas, que descubra que son el lenguaje que utiliza tanto la naturaleza, las artes y las ciencias como la economía, la empresa y el marketing. Se profundiza en cómo las matemáticas interaccionan con la actividad humana y la toma de decisiones, buscando relaciones, lenguajes y métodos para ordenar y armonizar, desde niveles más abstractos, tanto las cuestiones

planteadas y sus soluciones, como las relaciones de diferentes objetos entre sí. Para ello, el alumno debe conocer el lenguaje matemático, debe ser capaz de discernir qué información es relevante y pasarla a notación matemática, sistematizar, modelizar, analizar e interpretar los resultados, para posteriormente buscar la solución óptima utilizando herramientas de simulación.

El quehacer matemático es simultáneamente descubrimiento y creación. De este modo, la verdad en las matemáticas presenta tres caras:

- 1) La propia que surge de las relaciones entre objetos, desde su necesidad.
- 2) La que plantean las expresiones del quehacer matemático, histórico y falible.
- 3) La verdad lógica, su validez o consistencia, exigida en las teorías maduras.

SKILLS

Basic Skills

Students must have demonstrated knowledge and understanding in an area of study that is founded on general secondary education. Moreover, the area of study is typically at a level that includes certain aspects implying knowledge at the forefront of its field of study, albeit supported by advanced textbooks

Students must be able to apply their knowledge to their work or vocation in a professional manner and possess skills that can typically be demonstrated by coming up with and sustaining arguments and solving problems within their field of study

Students must have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgments that include reflections on pertinent social, scientific or ethical issues

Students must be able to convey information, ideas, problems and solutions to both an expert and non-expert audience

Students must have developed the learning skills needed to undertake further study with a high degree of independence

General Skills

To possess initiative, creativity and entrepreneurial spirit.

An ability to accomplish goals and solve problems, showing an ability to adapt to and make decisions in all manner of business management situations.

An ability to analyse, seek out and compare all types of information from a range of sources, although essentially linked to companies and markets.

To be able to apply relevant IT knowledge to the field of marketing and market research.

Specific skills

To read, analyse and easily interpret graphs, tables and texts to make suitable forecasts on demand and sales.

To be able to manage quantitative and computer tools for decision-making applicable to marketing and for effective presentations.

To be able to put knowledge into practice.

To develop criteria for problem-solving and decision-making both on a professional and personal level.

DISTRIBUTION OF WORK TIME

| CLASSROOM-BASED ACTIVITY | INDEPENDENT STUDY/OUT-OF-CLASSROOM ACTIVITY |
|---------------------------------|--|
| 60 hours | 90 hours |