

27536 - Decision-making systems

Información del Plan Docente

Academic Year	2017/18
Faculty / School	109 - Facultad de Economía y Empresa
Degree	449 - Degree in Finance and Accounting
ECTS	5.0
Year	4
Semester	First semester
Subject Type	Optional
Module	---

1.General information

1.1.Introduction

1.2.Recommendations to take this course

1.3.Context and importance of this course in the degree

1.4.Activities and key dates

2.Learning goals

2.1.Learning goals

2.2.Importance of learning goals

3.Aims of the course and competences

3.1.Aims of the course

3.2.Competences

4.Assessment (1st and 2nd call)

4.1.Assessment tasks (description of tasks, marking system and assessment criteria)

5.Methodology, learning tasks, syllabus and resources

5.1.Methodological overview

As the orientation of course is mainly practical, the contents will be presented in the computer room starting with the resolution of small decision problems. In the final sessions of the course, more complex situations will be handled. In this way, we look forward to develop the attitudes (abilities, habits and qualities) when coping with decision making in complex situations.

5.2.Learning tasks

Learning activities

Expositive sessions will be mixed with the resolution of problems, and in the final part of the course, the sessions will be completely practical.

Activities	Contact Hours	Autonomous Student Work	Total
Theory	15	15	30
Practice	25	48	73
Case Studies (practice)	6	12	18
Exams	4		4
TOTAL	50	75	125

5.3.Syllabus

PART I: INTRODUCTION

Lesson 1. Introduction to Decisional Systems

- 1.1 Decision Problems and Processes
- 1.2 Components of a Decisional System
- 1.3 Computer tools in Business Management

PART II: BUSINESS DECISION MAKING

Lesson 2. Decision Making. Optimisation

- 2.1 Introduction to Decision Making.
- 2.2 Optimisation Problems. Modelling and resolution
- 2.3 Optimisation Software for Decision Making
- 2.4 Applications in Finance and Accounting

27536 - Decision-making systems

Lesson 3. Decision Making. Simulation

3.1 Introduction to Simulation

3.2 Generation of Random Numbers and Variables

3.3 Simulation Software for Decision Making

3.4 Applications in Finance and Accounting

PART III: DATABASES

Lesson 4. Databases Management

4.1 Introduction to Databases

4.2 Relational Database Model

4.3 Design of Tables and Queries

4.4 Database Management Software: Microsoft Access

PART IV: CASE STUDIES

5.4.Course planning and calendar

The calendar will be presented to students once the course starts.

5.5.Bibliography and recommended resources

[BB: Bibliografía básica / BC: Bibliografía complementaria]

- [BB] Laudon, Kenneth C.. Sistemas de información gerencial / Kenneth C. Laudon, Jane P. Laudon . 12a. ed. México [etc.] : Pearson Educacion, 2012
- [BB] Silberschatz, Abraham. Fundamentos de bases de datos / Abraham Silberschatz, Henry F. Korth, S. Sudarshan ; revisión técnica Jesús Sánchez Allende . 6ª ed. Aravaca (Madrid) : McGraw-Hill Interamericana, D. L. 2014
- [BB] Winston, Wayne L.. Modelos financieros con simulación y optimización : una guía paso-a-paso de Excel y el software DecisionTools de Palisade / Wayne L. Winston . 3ª ed Ithaca, N.Y. : Palisade, cop. 2011