# uc3m Universidad Carlos III de Madrid

# Economy, management and organization of Health Systems and Hospital

Academic Year: ( 2020 / 2021 ) Review date: 15-07-2020

Department assigned to the subject: Bioengineering and Aeroespace Engineering Department

Coordinating teacher: CUSSO MULA, LORENA

Type: Compulsory ECTS Credits: 3.0

Year: 1 Semester: 2

## **OBJECTIVES**

This subject provides an approach of the basis of the management in the healthcare system, understanding the structural and administrative organization of all the departments of a hospital center. Moreover, students will analyze how the economic environment influences the healthcare system and will have the ability to make economic-financial models and decisions in the healthcare system.

## COMPETENCES THAT THE STUDENT ACQUIRES WITH THIS SUBJECT

CB6. Possess and understand knowledge that provides a base or opportunity to be original in the development and / or application of ideas.

CB7. That students know how to apply the knowledge acquired and their ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their area of study.

CB8. That students are able to integrate knowledge and face the complexity of formulating judgments based on information that, being incomplete or limited, includes reflections on social and ethical responsibilities linked to the application of their knowledge and judgments.

CB10. That the students possess the learning skills that allow them to continue studying in a way that will be largely autonomous.

CG3. Ability to design and carry out technological projects in the field of the application of engineering to medicine, as well as to analyze and interpret their results.

CG4. Ability to evaluate medical equipment and instrumentation in complex multidisciplinary environments, assessing the needs of different clinical users and offering objective measures for decision making.

CE2. Ability to understand and use the statistical methods necessary for conducting scientific studies, evaluation of equipment from the point of view of effectiveness, accreditation for medical use or study of comparative effects in patients.

CE3. Advanced knowledge of health technology management, both in technical and economic aspects, and including the acquisition and maintenance thereof.

## LEARNING RESULTS THAT THE STUDENT ACQUIRES

In overcoming this subject, students should be able to:

- Understand the structural and administrative organization of a hospital.
- Analyze the economic variables and environment and their influence in the healthcare environment.
- Know the importance of financial information and use it to make decisions about investment or financing.

# **DESCRIPTION OF CONTENTS: PROGRAMME**

The subject content is:

- Economic variables and analysis of the economic environment
- Financial and investment analysis
- Management in the health care system

#### LEARNING ACTIVITIES AND METHODOLOGY

## LEARNING ACTIVITIES

Theorical class

- Theoretical-practical class
- **Tutorials**
- Individual and team work

# **TEACHING METHODOLOGIES**

- Exhibitions in the teacher's class with support of computer and audiovisual media, in which the main concepts of the subject are developed and the bibliography is provided to complement the students' learning.
- Resolution of practical cases, problems, etc. raised by the teacher individually or in groups.
- Exhibition and discussion in class, under the teacher's moderation of topics related to the content of the subject, as well as practical cases.
- Preparation of papers and reports individually or in groups.

## ASSESSMENT SYSTEM

Continuous assessment: 70%

- Carrying out work, problems and/or practical activities.
- Student participation: It includes contribution to seminars, forum in Aula Global, attitude, classwork (quizzes or exercises to be solved in groups or individually), or other activities.

Final exam: 30%

The final exam will cover the whole subject and will count 30% of the final score. The minimum score in the final exam to pass the subject is 4.0 over 10, notwithstanding the mark obtained in continuous evaluation.

# Extraordinary exam:

The final score for students who attend the extraordinary exam will be 30% of the extraordinary exam and 70% of the continuous assessment, if available. In case of not presenting continuous assessment, the final score will be 100% the extraordinary exam.

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% end-of-term-examination:		30	
% of continuous assessment (assigments, laboratory, practicals):		70	