uc3m Universidad Carlos III de Madrid

Economy, management and organization of Health Systems and Hospital

Academic Year: (2023 / 2024) Review date: 16/05/2023 12:05:46

Department assigned to the subject: Bioengineering Department Coordinating teacher: REVILLA TORREJON, ANTONIO JAVIER

Type: Compulsory ECTS Credits: 3.0

Year: 1 Semester: 2

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

There are no recommendations.

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.
- CE8. To apply the appropriate innovation management tools and to assess the consequences of decisions on aspects of intellectual and industrial property protection.
- CE11. To plan, manage and supervise the installation and maintenance of non-implantable active medical devices in electromedical systems and their associated facilities, under quality criteria, in safe conditions and in compliance with current regulations.
- CE13. To plan, manage and supervise hospital infrastructures under quality criteria, in safe conditions and in compliance with current regulations.

LEARNING RESULTS THAT THE STUDENT ACQUIRES

In overcoming this subject, students should be able to:

- Know the techniques of analysis of the macroeconomic environment and the business market, as well

as analyze the basic macroeconomic indicators and their relationship with business decisions.

- Know the importance of financial information to be able to make decisions about investing or financing in a company or health institution.
- Know the evolution of the Spanish health system, emphasizing: the different management models of health services and where the health supply tends.

DESCRIPTION OF CONTENTS: PROGRAMME

- Analysis of the economic environment and macroeconomic variables.
- Financial and investment analysis.

Economy management and organization of Health Systems and Hospital

- Organization and management of the health system. Evolution fo Spanish National Health 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

% end-of-term-examination/test: 50 % of continuous assessment (assignments, laboratory, practicals...): 50

Ordinary evaluation

Continuous assessment: 50%

- 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: 50%

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 call:

- The final grade for students who attend the extraordinary will be the highest mark between:
- (1) 50% of the extraordinary exam and 50% of the continuous evaluation
- (2) 100% of the extraordinary exam.

BASIC BIBLIOGRAPHY

- null Asociación Española de Ingeniería Hospitalaria. (s.f.)., Obtenido de www.aeih.org.
- Temes Montes, J.L. y Mengíbar Torres, M. Gestión hospitalaria, MCGrawHill, 2002
- Temes Montes, J.L., Pastor y Aldeguer, V. y Diaz Fernandez. J.L. Manual de Gestión Hospitalaria, MCGrawHill., 1997

- null Organización para la Cooperación y el Desarrollo Económicos (OCDE). (s.f.)., Obtenido de www.ocde.org.

BASIC ELECTRONIC RESOURCES

- Proyecto Fundación Signo: https://www.fundacionsigno.com/
- . Sociedad Española de Directivos de la Salud (SEDISA): https://sedisa.net/
- . Proyecto Fundación Signo: https://www.fundacionsigno.com/
- . Proyecto Fundación Signo: https://www.fundacionsigno.com/
- Ruiz Iglesias, D. . Claves para la gestión clínica: https://www.fundacionpfizer.org/sites/default/files/claves_para_la_gestion_clinica.pdf