60948 - e-Health systems

Información del Plan Docente

Academic Year	2016/17
Academic center	110 - Escuela de Ingeniería y Arquitectura
Degree	533 - Master's Degree in Telecommunications Engineering
ECTS	3.0
Course	2
Period	Second semester
Subject Type	Optional
Module	---

1.Basic info

1.1.Recommendations to take this course

1.2.Activities and key dates for the course

2.Initiation

2.1.Learning outcomes that define the subject

2.2.Introduction

3.Context and competences

3.1.Goals

3.2.Context and meaning of the subject in the degree

3.3.Competences

3.4.Importance of learning outcomes

4.Evaluation

5.Activities and resources

5.1.General methodological presentation

The teaching methodology is structured in several levels: master classes which encourage student participation and development of activities and practical work or research application.

The proposed methodology aims to encourage creativity and autonomous and self-learning.

5.2.Learning activities

There will be the following activities:

A01 Theoretical classes with the active involvement of the student (22 hours). Main contents of the subject are presented. This activity will take place in the classroom. This activity is complemented with seminars from specialists involved in experiences of e-Health services.

A02 Cases (6 hours). The subject includes the approach, design and evaluation of e-Health project proposals.

A05 Development of practical tasks or research application. The work consists on a proposal for the service and / or application of telemedicine and e-health in different settings and scenarios, using the concepts and tools acquired in the subject. It also includes the oral presentation and discussion of that proposal.

A06 Tutorship. Students may solve any questions they might have about unclear contents of the course.

A08 Assessment. Set of theoretical and reporting practices and written tests. The detail is in the corresponding assessment activities section.

5.3.Program

Introduction

- Basic concepts.

- Requirements for systems and services, regulations, etc.

- Examples of systems.

Interoperability and standardization

- SCP-ECG standard

- IEEE11073 standard

- DICOM standard

- SNOMED CT standard

- HL7 standard

e-Health

- Architectures.

- Methodologies for services evaluation.

- Successes and failures of systems and e-Health services.

m-Health

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Mobile apps

- Web platforms

- User-centered design

- Quality in apps

5.4.Planning and scheduling

The course calendar is defined by the Escuela de Ingeniería y Arquitectura calendar.

5.5.Bibliography and recomended resources

- Wootton, R.. Introduction to Telemedicine / R. Wootton and J. Craig RSM Press. 1999.
- M-Health: Emerging Mobile Health Systems Springer Science. 2006
- M. M. Maheu, P. Whitten and A. Allen, (2001). E-Health, Telehealth, and Telemedicine. A guide to start-up and success. Ed. Jossey Bass.

- Andrés Martínez, (2001). Bases metodológicas para evaluar la viabilidad y el impacto de proyectos de Telemedicina. OPS, Washington DC.

- Canto Neguillo R, Olavarría Govantes L, Martín Castro C, Serrano Aguilar P, Márquez Peláez S, Benjumea Vargas MªM, en representación del grupo GET. Guía para evaluar sistemas y servicios de salud basados en Telemedicina. Red de Telemedicina. 2004.