

60948 - e-Health systems

Información del Plan Docente

Academic Year	2017/18
Subject	60948 - e-Health systems
Faculty / School	110 - Escuela de Ingeniería y Arquitectura
Degree	533 - Master's Degree in Telecommunications Engineering
ECTS	3.0
Year	2
Semester	Second 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

The methodology followed in this course is oriented towards achievement of the learning objectives. It aims to encourage creativity and autonomous learning. A wide range of teaching and learning tasks are implemented, such as lectures, student participation, and assignments.

5.2.Learning tasks

The course includes the following learning tasks:

- **A01 Lectures** (22 hours). The main contents of the course are presented. This activity will take place in the classroom. This activity is complemented with seminars by specialists involved in e-Health services.
- **A02 Practice sessions** (6 hours). The course includes the approach, design and evaluation of e-Health project proposals.
- **A05 Assignments**. They 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 learned in the course. It also includes the oral presentation and discussion of that proposal.
- **A06 Tutorials**. Students can solve any questions they might have about unclear contents of the course during office hours.
- **A08 Assessment**. A set of theoretical tasks, reports, and written tests. Details are in the "Assessment" section.

5.3.Syllabus

The course will address the following topics:

Topic 1. Introduction

- Basic concepts
- Requirements for systems and services, regulations, etc.
- Examples of systems

Topic 2. Interoperability and standardization

- SCP-ECG standard
- IEEE 11073 standard
- DICOM standard
- SNOMED CT standard
- HL7 standard

Topic 3. e-Health

- Architecture
- Methodologies for service evaluation
- Success and failures of systems and e-Health services

Topic 4. m-Health

- Mobile apps
- Web platforms
- User-centered design
- Quality in apps

5.4.Course planning and calendar

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course, will be provided on the first day of class or please refer to the EINA website.

5.5.Bibliography and recommended 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

60948 - e-Health systems

- 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 M^a M, en representación del grupo GET. Guía para evaluar sistemas y servicios de salud basados en Telemedicina. Red de Telemedicina. 2004.