

Información del Plan Docente

Academic Year	2017/18
Faculty / School	110 - Escuela de Ingeniería y Arquitectura
Degree	547 - Master's in Biomedical Engineering
ECTS	3.0
Year	1
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 promotes creativity and autonomous learning. A wide range of teaching and learning tasks are implemented, such as lectures, practical tasks, and specific research activities.

Students are expected to participate actively in the class throughout the semester.

5.2.Learning tasks

The course includes the following learning tasks:

- A01 Lectures (22 hours). The professor will explain the main contents of the course. They are complemented with seminars from specialists involved in experiences of e-Health services.
- A02 Case studies (6 hours). The course includes the approach, design and evaluation of e-Health project proposals.
- A05 Assignments. Students work 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 may ask any questions they might have about unclear contents of the course.
- A08 Assessment. A set of written tests and assignments. The relevant information is described in section 4 (Assessment tasks).

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
- IEEE11073 standard
- DICOM standard
- SNOMED CT standard
- HL7 standard

Topic 3. e-Health

- Architectures.
- Methodologies for service evaluation.
- Successes 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

- R. Wootton and J. Craig. Introduction to Telemedicine. RSM Press. 1999.
- M-Health: Emerging Mobile Health Systems, Springer Science. 2006.

69315 - e-Health systems

- M. M. Maheu, P. Whitten and A. Allen, (2001). *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 M^a M, en representación del grupo GET. *Guía para evaluar sistemas y servicios de salud basados en Telemedicina*. Red de Telemedicina. 2004.