

# 30259 - Agile Methodologies and Quality

#### Información del Plan Docente

Academic Year 2017/18

Faculty / School 110 - Escuela de Ingeniería y Arquitectura

**Degree** 439 - Bachelor's Degree in Informatics Engineering

**ECTS** 6.0 **Year** 4

Semester Second semester

Subject Type Compulsory

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 learning process designed for this subject is based on the following:

Learning is obtained from three inputs: explanatory sessions provided by the professors, work developed in practical sessions, and students' own work (individual or in groups).



# 30259 - Agile Methodologies and Quality

### 5.2.Learning tasks

The program offered to the students to help them achieve the expected results includes the following activities...

The activities will be divided into class sessions, problem solving (with and without professor tutelage), practical sessions in laboratory, work in groups, and evaluation activities.

### 5.3. Syllabus

The program of the course is divided into the following topics:

- · Fundamentals of software quality
- Software quality metrics
- Quality Management, Assurance and Control
- · Traditional methodologies vs agile methodologies
- · Agile methodologies
- · Agile practices and methods

## 5.4. Course planning and calendar

#### Sessions and presentations scheduling

The schedule of the subject will be defined by each academic center based on the academic calendar of the corresponding course.

### **Student Work**

The dedication of the student to achieve the learning outcomes in this subject is estimated to be 150 hours distributed as follows:

- 60 hours, approximately, of classroom activities (theoretical and problems sessions in the classroom, and practical sessions in the laboratory)
- 60 hours of work in groups
- 22 effective individual hours of work and study (studying notes and texts, problem solving, class and laboratory sessions preparation, etc.)
- 8 hours devoted to various evaluation tests

#### 5.5.Bibliography and recommended resources

[BB: Bibliografía básica / BC: Bibliografía complementaria]

- [BB] Beck, Kent . Extreme Programming Explained: Embrace Change / Kent Beck . 2nd edition Addison-Wesley, 2004
- [BB] Beck, Kent. Una explicación de la programación extrema : aceptar el cambio / Kent Beck ; traducción, Francisco Javier Zapata Martínez ; revisión técnica, Jesús García Molina, Luis Joyanes Aguilar ; [prólogo de Erich Gamma] . 1a. ed. en español Madrid [etc.] : Addison Wesley, 2002
- [BB] Kan, Stephen H. Metrics and Models in Software Quality Engineering / Stephen H. Kan . 2nd edition Addison-Wesley, 2002



# 30259 - Agile Methodologies and Quality

- [BC] Chrissis, Mary Beth. CMMI for development: guidelines for process integration and product improvement / Mary Beth Chrissis, Mike Konrad, Sandy Shrum. 3rd ed. Upper Saddle River, New Jersey: Addison-Wesley, cop. 2011
- [BC] Cockburn, Alistair. Agile Software Development: The Cooperative Game / Alistair Cockburn. . 2nd ed. Addison-Wesley. 2006