uc3m Universidad Carlos III de Madrid

Integrated project management

Academic Year: (2021 / 2022) Review date: 09-05-2018

Department assigned to the subject:

Coordinating teacher: GARCIA GUZMAN, JAVIER

Type: Electives ECTS Credits: 3.0

Year: 1 Semester: 1

OBJECTIVES

At the end of the subject, the student will acquire a general overview of the following areas:

- a) Basic Concepts in the area of Integrated Management of Software Projects
- b) Project Management Bodies of Knowledge
- c) Analysis of practices and Techniques for Integrated Management of Software Projects
- d) Research Areas related to Integrated Management of Software Projects
- e) Current state in Research Areas related to Integrated Management of Software Projects
- f) Research Challenges in the Areas related to Integrated Management of Software Projects

The general competences or skills work during this subject are:

- 1) Critical analysis of information regarding the research areas considered in the scope of the subject
- 2) Preparation of multimedia materials for the presentation and ddiscussion of the research areas considered in the scope of the subject
- 3) Planification and management of a small research project.
- 4) Implmentation of a workplan to identify the current state of the research areas considered in the scope of the subject

DESCRIPTION OF CONTENTS: PROGRAMME

LESSON 1: Basic Concepts in the area of Integrated Management of Software Projects

LESSON 2: Project Management Bodies of Knowledge

LESSON 3: Analysis of practices and Techniques for Integrated Management of Software Projects

LESSON 4: Research Areas related to Integrated Management of Software Projects

LESSON 5: Current state in Research Areas related to Integrated Management of Software Projects

LESSON 6: Research Challenges in the Areas related to Integrated Management of Software Projects

The advanced topics considered in the scope of lessons 4, 5 and 6 are:

- Project Managers Capacitation and Continuous Training
- eLearning Approchaes for capacitating agile software project managers.
- Lean Startup and project management in the context of recently created and emerging software companies
- Change management fundamentals
- RTD Projects management in the European context
- Big Data Technologies supporting software project estimation and planning
- Big Data Technologies supporting the determination of the business value of a software project
- Application of gamification principles to enhance the performance in software project management
- Knowledge management in software projects
- Talent management in software companies
- La gestión del trabajo en GSD y DSD
- Project Management in multidisciplinary and complex environments

LEARNING ACTIVITIES AND METHODOLOGY

TEACHING METHODOLOGY

A) Lessons 1, 2 and 3

- First Part: Review of previous lesson. Presentation of the solutions of the exercises proposed previous week
- Second Part: Presentation of theoretical concepts on the topic
- Third Part: Exercises. Approach and Discussion of the Proposed Exercises

- B) Temas 4, 5 y 6
- Part 1: Introduction to the advanced topics considered
- Part 2: Discussion on the assignments presented by students
- Part 3: 360 evaluation of the assignments presented and improvement recommendations

ASSESSMENT SYSTEM

The distribution of the final mark is obtained from the assignments given to the students using the following distribution:

- a) Class execrases and participation in 360 evaluation process: 10%
- b) Assignment 1: Research Areas related to Integrated Management of Software Projects: 15%
- c) Assignment 2: Current state in Research Areas related to Integrated Management of Software Projects: 25%
- d) Assignment 3: Research Challenges in the Areas related to Integrated Management of Software Projects: 50% Es imprescindible superar cada uno de estos aspectos para poder superar la asignatura

% end-of-term-examination: 0 % of continuous assessment (assignments, laboratory, practicals...): 100

BASIC BIBLIOGRAPHY

- null A Guide to the Project Management Body of Knowledge: PMBOK(R), Project Management Institute, 2013
- Richard E. (Dick) Fairley; Publisher Managing and leading software projects, John Wiley ans Sons, 2009
- Snyder, Cynthia Stackpole A Project Manager's Book of Forms: A Companion to the PMBOK Guide, John Wiley & Sons, 2013
- Sean Whitaker PMP® Training Kit, Microsoft Press, 2013