Universidad Zaragoza

Year : 2019/20

60811 - Industrial and R&D project management

Syllabus Information

Academic Year: 2019/20
Subject: 60811 - Industrial and R&D project management
Faculty / School: 110 - Escuela de Ingeniería y Arquitectura
Degree: 532 - Master's in Industrial Engineering
330 - Complementos de formación Máster/Doctorado
ECTS: 6.0
Year: XX
Semester: First semester o Second semester
Subject Type: 532 - Compulsory
330 - ENG/Complementos de Formación
Module: ---

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

The student must demonstrate that he/she has achieved the anticipated learning outcomes through the following assessment activities:

Option 1
This option is aimed at those students who can regularly follow the activities of the course (both the practical and the theoretical sessions). In this case, the evaluation will consist in the realization of a global assessment test in the exam period on the day established by the School, which will consist of the following parts:
? Individual test. It is intended to evaluate if the student has understood the basic concepts of the course, master the terminology and is able to apply these concepts to the understanding of small exercises or problems. The test will be 30% of the student's grade.
? Practical work(s). Throughout the course one or more practical works will be carried out, which must be delivered and presented on the day the global assessment test takes place. The quality of the documentation presented by the work team as well as the defense thereof will be valued, and will account for 70% of the student's grade. It will be mandatory to carry out these practical work(s) as a group. For the evaluation of these practical works the professors will be able to propose systems of evaluation by peers, in which the own students will evaluate the performance of their teammates during the accomplishment of the works and / or practical cases and that will serve to determine the qualification of each student in the practical part.

Option 2
This option is aimed at those students who can not participate in the learning activities of the course on a regular basis. In this case, the evaluation will consist in the realization of a global assessment test identical to that of Option 1, with the difference that the practical work(s) will be carried out individually.

In any of both options, in order to pass the course it is necessary that the student has obtained a grade equal to or higher

than 5.0 in each of the tasks that comprise the global assessment test. In case of not meeting this condition, the final grade will be that of suspense 4.0, unless the result of the average between the theoretical exam and the evaluation of the practical work is less than 4.0, in which case the final grade will correspond to that value.

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The methodology followed in this course is oriented towards achievement of the learning objectives. It is based on case-based learning. Students will apply all the knowledge learned in the lectures through the solving of case studies, tasks with specific software and simulation workshops.

4.2.Learning tasks

The course includes the following learning tasks:

- **Lectures** (30 hours). Each week students will have the opportunity to receive theory sessions covering the fundamental topics of project management.
- **Practice sessions** (20 hours). Session using the software Microsoft Project and ProSiGa.
- **Case studies** (75 hours). Time expected to carry out case studies where the student will acquire the majority of expected competences and of the learning results of this course. The cases will be carried out our by teams.
- **Conferences and seminars by professionals** (4 hours). Complementary activities to the lectures, which also enhance the knowledge in the field of project management.
- **Autonomous work and study** (20 hours). Average time estimated necessary for the preparation of the exam.
- **Exam** (1 hour). Time scheduled for the theoretical exam, mainly based on multiple choice questions.

4.3.Syllabus

The course will address the following topics:

Lectures

1. Introduction and project life cycle
2. Project scope and definition
3. Project management in research projects
4. Time management
5. Cost management
6. Risk management
7. Procurement management
8. Health and safety in project management
9. Human resources in project management
10. Agile project management

Case Studies

- Case 1. Definition and scope
- Case 2. Microsoft Project
- Case 3. Stochastic planning
- Case 4. Project control through Earned Value Management
- Case 5. Project risk management
- Case 6. Human resources in project management
- Case 7. Integration
- Case 8. Project Simulation Game

Practice sessions

- Session 1. Microsoft Project
- Session 2. Stochastic planning

4.4.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.

4.5.Bibliography and recommended resources