Universitat de les Illes Balears

Teaching guide

Academic year	2016-17
Subject	11536 - Project Planning and Management
Group	Group 1, 1S
Teaching guide	B
Language	English

Subject identification

Subject	11536 - Project Planning and Management
Credits	1.44 de presencials (36 hours) 4.56 de no presencials (114 hours) 6 de totals (150 hours).
Group	Group 1, 1S (Campus Extens)
Teaching period	First semester
Teaching language	English

Professors

Lecturers	**Horari d'atenció als alumnes**					
	Starting time	**Finishing time**	**Day**	**Start date**	**Finish date**	**Office**
Antonia Mas Pichaco antonia.mas@uib.es	13:00	14:00	Wednesday	12/09/2016	10/02/2017	AT114
	13:00	14:00	Tuesday	13/02/2017	07/07/2017	AT114
Antoni Lluís Mesquida Calafat antoni.mesquida@uib.es	13:00	14:00	Wednesday	12/09/2016	10/02/2017	D138
	13:00	14:00	Tuesday	13/02/2017	07/07/2017	D138

Contextualisation

The Project Planning and Management course is a compulsory course of the Management block of the Master's Degree in Computer Engineering (MINF).

The main objective of the course is to ensure that students knowand apply the project management best practices collected in the PMBOK® Guide (*Project Management Body of Knowledge*) by the PMI® (*Project Management Institute*) and the concepts and processes of the ISO 21500 international standard.

In order to promote the achievement of results with less time and cost, and with higher quality, this course will providethe basic principles and the main techniques used to perform an Agile project management. This modue,*Lean & Agile Project Management*, will provide the project manager with the knowledge and skills necessary to collaborate, motivate and communicate better.

Requirements

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Recommendable

It is recommended that students have basic knowledge and skills related toproject management, such as those typically introduced in courses such as 21723 - Project Management of the UIB degree in Computer Engineering.

Skills

Specific

* CE1 - Integrate computer engineering technologies, applications, services and systems to cover a broad range of multidisciplinary contexts.
* CE2 - Undertake strategic planning, preparation, direction, coordination, and technical and financial management in the areas of computer engineering related to:computer systems, applications, services, networks, infrastructures or installations and software development centres or factories, applying criteria of quality and environmental sustainability, in multidisciplinary work environments.
* CE3 - Lead research, development and innovation projects in companies and technology centres, safeguarding persons and goods and overseeing product quality and certification.

Generic

* CG1 - Propose, calculate and design products, processes and installations in all areas of computer engineering.
* CG3 - Lead, plan and supervise multidisciplinary teams.
* CG5 - Display a capacity for the preparation, strategic planning, coordination and technical and financial management of projects in all areas of computer engineering, applying criteria of quality and environmental sustainability.
* CG6 - Display a capacity for general and technical management and management of research, development and innovation projects in companies and technology centres, in the field of computer engineering.

Basic

* You may consult the basic competencies students will have to achieve by the end of the Master's degree at the following address: http://estudis.uib.cat/master/comp_basiques/

Content

Students will follow an itinerary between the two following possibilities, depending on their knowledge base:

* Itinerary A is designed for students who have just completed a basic course in project management, with contents similar to that offered in the course 21723 - Project Management of the UIB degree in Computer Engineering.
* Itinerary B is aimed at students with advanced knowledge in project management, with contents similars to that offered in the course 21733 - Advanced Project Management of the UIB degree in Computer Engineering.

Theme content

I. Itinerary A

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I.1. Procurement management
I.2. Risk management
I.3. Quality management
I.4. EVM: Earned Value Management
I.5. Agile project management
I.6. Professional skills of a Project Manager

II. Itinerary B
II.1. Preparation for the CAPM Certification
II.2. Professional skills of a Project Manager

Teaching methodology

The teaching methodology proposed for the course is as follows:

* **Learning theoretical concepts**. In order todevelop the theoretical content of the course, students will have different materials related to eachsession. They will have to review, read, analyze or try to solve everything according to the instructions given by the teacher before class time. During the session, the possible doubts from students will be solved, and the teacher will show how these concepts are applied into practice. This method of active learning through questions, discussions and applied activities, transfer parts of the learning process outside the classroom and uses class time, along with the experience of teaching, to facilitate and promote the acquisition of knowledge.
* **Exercises** (Project-based cooperative learning studying a case study and solving problems). Students must do a set of exercises, using all the knowledge acquired during lectures. To facilitate the work of the students, some clear goals will be defined with deadlines.
* **Self-learning**. It is important to motivate students to complete the learning of the course by other means, in addition to lectures, both theoretical and practical. The first action is to promote the consultation of the literature, both basic and complementary, which discusses specific topics. They can also complement the knowledge visiting recommeded websites.
* **Using tools**. Students will learn how to use specific tools for project management.

In order to encourage autonomy and personal work of the student, the course is part of Campus Extens, dedicated to flexible and distance education, which incorporates the use of telematics inuniversity education. Thus, by Moodle tele-education platform, students will have at their disposal an online and distance communication with the teacher, a calendar with news, electronic documents, Internet links and the proposed autonomous work.

Any communication made through Campus Extens will prevail over what has been said during the lectures. It is the responsibility of the student to access the platform frequently to know all the news of the course.

In-class work activities

Modality	Name	Typ. Grp.	Description	Hours
Theory classes	Introduction of theoretical concepts	Large group (G)	Students will work with the theoretical contents with practical examples where these concepts can be applied. Students will have several materials related to each study area that will allow them to deepen their knowledge. All material will be available through Campus Extens.	20

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Modality	Name	Typ. Grp.	Description	Hours
Seminars and workshops	Seminars, workshops and conferences	Medium group (M)	During the course a set of workshops and seminars to work transversal skills of project management will be held.	4
Practical classes	Practical part	Large group (G)	The set to practical tasks to do and the weight of each one varies depending on the Itinerary: Students of the Itinerary Ashall: * Plan asoftware development project. * Solve the activitiesproposedin the seminars. Students of the Itinerary Bshall: * Prepare the CAPM certification. * Prepare a seminar on the professional skills of a Project Manager. Propose activities to work on the concepts introduced. * Co-assess the project plans of students inthe Itinerary A. * Solve the activitiesproposedin the seminars.	12

At the beginning of the semester a schedule of the subject will be made available to students through the UIBdigital platform. The schedule shall at least include the dates when the continuing assessment tests will be conducted and the hand-in dates for the assignments. In addition, the lecturer shall inform students as to whether the subject work plan will be carried out through the schedule or through another way included in the Campus Extens platform.

Distance education work activities

Modality	Name	Description	Hours
Individual self-study	Individual tasks	To perform a set of tasks related to the management of software development projects. The goal is to apply all the theoretical concepts introduced during the lectures todifferent case studies.	34
Individual self-study	Study	To understand the theoretical concepts introduced throughout the course.	40
Group self-study	Team tasks	Perform a set of tasks in teams. The student will analyze how to apply the project management best practicesin a real project, in order to identify howthe management and collection of lessons learned can be improved .	40

Specific risks and protective measures

The learning activities of this course do not entail specific health or safety risks for the students and therefore no special protective measures are needed.

Student learning assessment

This section collectsthe evaluation criteria and their weight in the rating of the course.

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The student will get a numerical rating between 0 and 10 for each activity, which will be weighted according to their weight, to obtain the overall grade for the course. Students must work in the practical partcontinuously during the course and must get a score higher than or equal to 5 in order to be able to make the average with the exam grade. Students who do not obtain an exam score greater than or equal to 5 will not be allowed to make the average with the practical part,but will have a recovery exam in July.

When qualifying both the paractical part and the exam, it will be assessed that the student has developed the following skills:

* Must have the ability to innovate in the treatment of the issues addressed.
* Must show initiative in planning alternatives or solutions to the problems raised.
* Must participate actively in the resolution of all cases raised during the practical sessions.
* Must have the ability to critically making positive contributions in his comments.

Moreover, it will be alsoassessed that the student has developed the following skills:

* Learn to search, collect and use information from different sources with different media.
* Express, summarize, write, structureand presenteall the documentation associated with a project.
* Recognizing the importance of communication mechanisms, especially in public presentations.
* Ability to work in a team, dividing the job but adding capabilities.
* Assess leadership skills, learn to negotiate, make decisions, solve problems.

Introduction of theoretical concepts

Modality	Theory classes
Technique	Objective tests **(retrievable)**
Description	Students will work with the theoretical contents with practical examples where these concepts can be applied. Students will have several materials related to each study area that will allow them to deepen their knowledge. All material will be available through Campus Extens.
Assessment criteria	All students must pass a written test at the end of the course: * For students of Itinerary A, the test will evaluatethe concepts worked in the two halves of the course. * For students of ItineraryB, the test will evaluate the concepts studied in the second half of the course. In both cases, the student must obtain at least 5 points out of 10. Skills assessed: CE1, CG6 and CG1.

Final grade percentage: 50% for the training plan A with minimum grade 5
Final grade percentage: 30% for the training plan B with minimum grade 5

Practical part

Modality	Practical classes
Technique	Papers and projects **(retrievable)**
Description	The set to practical tasks to do and the weight of each one varies depending on the Itinerary: Students of the Itinerary Ashall: *Plan asoftware development project.*Solve the activitiesproposedin the seminars. Students of the Itinerary Bshall: *Prepare the CAPM certification.*Prepare a seminar on the professional skills of a Project Manager. Propose activities to work on the concepts introduced.*Co-assess the project plans of students inthe Itinerary A.*Solve the activitiesproposedin the seminars.
Assessment criteria	The weights of the tasksand the dedicationto carry them out , both individually and as a team, are defined in a document that is available to students through Campus Extens. In order to pass the practical part of the course, the student must get a minimum score for each task greater than or equal to 5. The average ratings for all tasks must be equal to or greater than 5.

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The qualification of the practical part, in addition to assessing the correctness of each task also will consider other aspects such as the degree of participation and motivation of each student.

Copying a task between different students would imply afail markof the practial part for all the students involved and the inability to pass the course for the course.

The maximum grade for tasks in the extraordinary period will be 5.

Skills assessed: CE2, CE3, CG3 and CG5.

Final grade percentage: 50% for the training plan A with minimum grade 5
Final grade percentage: 70% for the training plan B with minimum grade 5

Resources, bibliography and additional documentation

Basic bibliography

* A Guide to the Project Management Body of Knowledge (PMBOK Guide) - Fifth edition. 2013 Project Management Institute.
* Guía de los Fundamentos para la Dirección de Proyectos (Guía del PMBOK) - Quinta edición. 2014 Project Management Institute.
* Software Extension to the PMBOK Guide - Fifth Edition. 2013 Project Management Institute.

Complementary bibliography

* Lean Software Development: An Agile ToolkitMary Poppendieck y Tom Poppendieck, 2003.
* Scrum and XP from the TrenchesHenrik Kniberg, 2007.
* Kanban and Scrum – Making the Most of BothHenrik Kniberg y Mattias Skarin, 2010.
* User Stories Applied: For Agile Software DevelopmentMike Cohn, 2004.
* Succeeding with Agile: Software Development Using ScrumMike Cohn, 2009.
* Crystal Clear: A Human-Powered Methodology for Small TeamsAlistair Cockburn, 2004.
* Agile Software Development, Principles, Patterns, and PracticesRobert C. Martin, 2002.

Other resources

* Project Management Institute - http://www.pmi.com
* Associació de Project Management de les Illes Balears - http://www.pmi-balear.org
* Agile Manifesto - http://agilemanifesto.org

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