Universitat de Lleida

DEGREE CURRICULUM
IT PROJECT MANAGEMENT

Coordination: GARRIDO NAVARRO, JUAN ENRIQUE

Academic year 2023-24

IT PROJECT MANAGEMENT 2023-24

Subject's general information

Subject name	IT PROJECT MANAGEMENT
Code	103081
Semester	1st Q(SEMESTER) CONTINUED EVALUATION

Typology	Degree	Course	Character	Modality
	Master's Degree in Informatics Engineering	1	COMPULSORY	Attendance-based

Course number of credits (ECTS)	7.5

Type of activity, credits, and groups	Activity type	PRALAB	TEORIA
	Number of credits	6	1.5
	Number of groups	1	1

Coordination	GARRIDO NAVARRO, JUAN ENRIQUE
Department	COMPUTER ENGINEERING AND DIGITAL DESIGN
Teaching load distribution between lectures and independent student work	7.5 ECTS correspond to 187 work hours (57 in-class, 130 out-of-class).
Important information on data processing	Consult this link for more information.
Language	English
Distribution of credits	Josep Ramon Freixanet: 1 ECTS Juan Enrique Garrido Navarro: 3 1CTS Josep Escribà Garriga: 3,5 ECTS

IT PROJECT MANAGEMENT 2023-24

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
ESCRIBA GARRIGA, JOSEP	josep.escriba@udl.cat	5	
FREIXANET CASAS, JOSEP RAMON	josepramon.freixanet@udl.cat	1	
GARRIDO NAVARRO, JUAN ENRIQUE	juanenrique.garrido@udl.cat	1,5	

Subject's extra information

This course will provide the student with the principles and techniques of Project Management for IT projects. The basics of Financial Reporting and Profitability analysis will briefly be covered, with the major amount of time spent on ways to understand, analyse and use the data for decision making. To follow this subject properly some previous knowledge on Business Management is recommended.

Learning objectives

- Identify costs and profits in analyzing the economic performance of the products, processes, and systems.
- Calculate and apply some profitability indicators.
- Learn the basics of Project management.
- Develop a Project plan to manage, execute and monitor a Project.
- Know different models to develop software, specially the agile model.
- Carry out a software development Project following an agile methodology.

Competences

General Competences

- **CG1**. Capacity to project, calculate and design products, processes and installations in all fields of Computer Engineering.
- **CG2**. Capacity to manage computing systems works and installations, in compliance with current regulations, and assure quality service.
- **CG3**. Capacity to manage, plan and supervise multidisciplinary teams.
- **CG5**. Capacity to elaborate, strategically plan, manage, coordinate and technically and economically manage projects in all fields of computer engineering following quality and environmental criteria.
- **CG7**. Capacity to implement and manage computer equipment manufacturing processes, guaranteeing personal and material safety, the final quality of products and their homologation.
- **CG9.** Capacity to understand and apply ethical responsibility, legislation and professional ethics in computer engineering activities.
- **CG10**. Capacities to apply economic principles, manage human resources and projects, and comply with computer legislation, regulation and normalization.

Strategic Competences of UdL

- **UdL3.** Mastering ICT's.
- **UdL4.** To respect the fundamental rights of equality between men and women, the promotion of the Human Rights and the principles of a culture of peace and democratic values.

Cross-disciplinary Competences

- **EPS4**. Capacity to conceive, design and implement projects and/or contribute to new solutions, using engineering tools.
- **EPS5**. To be motivated for the quality and steady improvement.

Basic Competences

- **CB2.** That the students can apply their knowledge and their ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study.

Specific competences

- **CE1**. Capacity for the integration of technologies, applications and computer engineering systems, in general and in wider and multidisciplinary contexts.
- **CE2**. Capacity for the strategic planning, preparation, direction, coordination, and technical and economic management in the fields of the computer engineering in: systems, applications, services, networks, infrastructures or computer installations and centres or factories of software development, complying with the suitable fulfilment of the quality criteria and multidisciplinary working environments.
- **CE3**. Capacity for the direction of research, development and innovation projects, in companies and technological centres, with guarantee of security for people and resources, the final quality of the products and his certification.
- **CE6**. Capacity to ensure, manage, audit and certify the quality of the developments, processes, systems, services, applications and computer products.
- **CE8**. Capacity to analyse the information needs that arise and to carry out all the stages of the process of construction of an information system.

Subject contents

PART 1.

Lesson 1. Idea Generation

Lesson 2. Economic viability. Main KPI's

PART 2.

Lesson 3. Models and methodologies

Lesson 4. SCRUM methodology

PART 3.

Lesson 5. Real software project development together with the PTIC subject. At this point we will manage this project by using SCRUM

Methodology

Teaching methodology is based on project-based learning.From a proposed technological business idea, theoretical topics of the subject are developed. This project is performed in coordination with an other subject of the master:ICT Project: Development and Implementation. During the semester will combine theoretical and practical sessions that pretend to do a follow-up.

Development plan

Course Schedule. Course 23/24 ICT Project: Development and Implementation and IT Project Management

IT PROJECT MANAGEMENT 2023-24

Week	Content
1	"Team Building Week"
2	"Team Building Week"
3	Workshop (Preparation) + Workshop "Presentation of the projects" + ICTP + ITPM
4	Groups + ITPM + ICTP + Sprint Planning
5	ICTP + ITPM
6	ICTP + ITPM
7	ICTP + ITPM
8	ICTP + Sprint Review + Retrospective + Sprint Planning
9	ICTP + ITPM
10	ICTP + ITPM
11	ICTP + Sprint Review + Restrospective
12	Mentoring + ICTP + Sprint Preparation +ITPM
13	ICTP + ITPM
14	ICTP + ITPM
15	Sprint Review + Retrospective + ITPM + Mentoring
16	Final Project + Final Presentation

Evaluation

Continuous assesment:

Group Qualification Result: 60% of final mark			
Block	Evaluation Point	Percentage	Description
Block S1	Sprint 1	12,5%	- Project Management Evaluation. - "Sprint Planning" and "Sprint Review" evaluation. - Implemented code and features general evaluation.
Block S2	Sprint 2	12,5%	- Project Management Evaluation. - "Sprint Planning" and "Sprint Review" evaluation. - Implemented code and features general evaluation.
Block S3	Sprint 3	12,5%	- Project Management Evaluation. - "Sprint Planning" and "Sprint Review" evaluation. - Implemented code and features general evaluation.
Block FP	Final Presentation	22,5%	- Evaluation of student's oral and presentation skills. - Commercial presentation of the project. - Presentation quality in terms of coherence and content.

Individual Result: 40% of final mark			
Block	Evaluation Point	Percentage	Description
Block W	Workshop	10%	- Workshop attendance; - Participation in the workshop by elaborating ideas.
Bloc PR	Peer Review	10%	- Evaluation of the peer review. - Evaluation of problems found/corrected. - Evaluation of conflicts found/correct.
Block IPP	Implication/Participation in the project.	10%	Active participation in the project. (measured by commits and resolved tasks).
Block TE	Technical Evaluation	10%	Evaluation of the project management, cost assessment and product development concepts that should be learned during the project.

Alternative assesment:

As all the activities in Block S1, Block S2, Block S3 and Block FP are in group, the student must follow the pace of the rest of the partners, even not coming to class, and respecting all the oral activities programmed dates.

Bibliography

- John White, Kellie Grasman, Kenneth Case, Kim LaScola Needy and David Pratt. (2014). **Fundamentals of Engineering Economic Analysis**. Wiley.
- Project Management Institute. **A Guide to the Project Management Body of Knowledge 5a Edición.** PMI, 2013. ISBN: 978-1-62825-009-1
- Henrik Kniberg. **Scrum y XP desde las trincheras**. C4Media, editor de InfoQ.com, 2007. (Traducción al español). ISBN: 978-1-4303-2264-1
- Henrik Kniberg and Mattias Skarin. **Kanban y Scrum. Obteniendo lo mejor de ambos**. C4Media, editor de InfoQ.com, 2010. (Traducción al español). ISBN: 978-0-557-13832-6
- https://scrumguides.org/scrum-guide.html
- https://www.scrumalliance.org