

Training Activity (project methodology)

ECTS: 3 ECTS

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UNIVERSITY WHERE THE COORDINATOR IS: USC

HAVE YOU GIVEN PERMISSION TO RECORD YOUR CLASSES? Yes

LECTURER 1: Francisco José González Diéguez (franciscojose@gonzalezdieguez.com)

UNIVERSITY WHERE THE LECTURER 1 IS: USC

HAVE YOU GIVEN PERMISSION TO RECORD YOUR CLASSES? Yes

SUBJECT CONTENTS

Theoretical:

Conceptual Framework Project Management (what needs to be done and how).

Time Management (how long it will take to complete, and how we will ensure that we meet that deadline).

Risk Management (opportunities and threats that can affect the accomplishment of the objectives of the project and how we will manage them).

Project Management Integration (how we plan and control the project, taking into account all the areas).

Practical:

Comment: Expectations / Ex. Project

Creativity

SWOT

Risk Management

Multicriteria Analysis

Financial Evaluation of Projects

Project Schedule

Project Management with ProjectLibre:

1. Project management basics.
2. Project plan: Definition and project calendar. Adding and organizing tasks. Task dependencies. Tasks breakdown. Milestones. Time constraints.
3. Resources management: Resources definition. Customized work schedule. Adding and assigning resources. Overbooking. Resources redistribution.
4. Cost management: resources assignment cost. Cost rate table application. Assigning resources to tasks.
5. Information summary: Project statistics. Gantt diagram and network diagram. Use of tasks. Use of resources.
6. Tracking project: Baseline. Progress line. Tracking and updating tasks. Update and rescheduling the project. Monitoring of resources and costs. Overtime.
7. Reporting information: Creating a report. Creating a customized report.
8. Practice: Planning and tracking an industrial mathematics project.

METHODOLOGY

-Class attendance and Practice: Exhibition of contents by presentation or explanation by a teacher (including demonstrations). Problem-based learning. Oriented educational approach to learning and instruction in which students solve real problems.

-Practical works: Preparation to deliver activities in the practical sessions.

-Complementary activities: voluntary mentoring and training activities related to the course: readings, seminars, attendance at conferences, seminars, videos, etc..

LANGUAGE USED IN CLASS: Spanish

IS IT COMPULSORY TO ATTEND CLASS? Students can attend via conference system.

BIBLIOGRAPHY

Basic:

IPMA. Bases para la competencia en dirección de proyectos. NCB 3.1.

PMI Standards Committee. Guía de los Fundamentos de la Dirección de Proyectos Tercera Edición (Guía del PMBOK). Project Management Institute (USA)

Lisa A. Bucki. OpenProj: The Open Source Solution for Managing your Projects. Course Technology, 2008.

Complementary:

- Amándola, L.J.. Estrategias y tácticas en la dirección y gestión de proyectos Valencia : Editorial de la UPV
- Chu, M., Altwies, D., Walker, E. Achieve PMP exam success. J. Ross Publishing, USA
- de Cos, M. Teoría general del proyecto. Síntesis, España.
- Frame, J. D.. La nueva dirección de proyectos : herramientas para una era de cambios rápidos.Barcelona : Granica
- Ibbs, C.W., Kwak, Y.H. Assessing project management maturity. Project Management Journal, Vol. 31, No. 1, pp. 32-43, Project Management Institute, USA.
- Kerzner, H. Project management case studies, Wiley
- Kerzner, H. Project management, Wiley
- Lewis, J.P. Planificación, programación y control de proyectos. Ediciones S.
- Lewis, James P. Las claves de la gestión de proyectos. GESTION 2000.
- Lock, D. Project Management. Gower Publishing.
- Meredith, J.R., Mantel, S.J. Project management. A managerial approach. John Wiley, New York, USA.
- Morris, P.W.G. The Management of Projects. Thomas Telford Publications, London.
- Morris, Peter W.G., Pinto, Jeffrey K. The Wiley guide to managing projects. John Wiley.
- Pereña, J.. Dirección y gestión de proyectos. Madrid : Díaz de Santos.
- Phillips, J. PMP study guide. McGraw-Hill.
- PMI Standards Committee. Guide to the Project Management Body of Knowledge 5th Edition (PMBOK Guide). Project Management Institute (USA).
- Turner, J.R. The handbook of project-based management: improving the processes for achieving strategic objectives. The Henley Management Series, McGraw Hill.

SKILLS

Basic:

- CG1: To have knowledge that provide a basis or opportunity for originality in developing and / or applying ideas, often within a research context, knowing how to translate industrial needs in terms of R & D in the field of mathematics Industrial.
- CG2: To be able to apply the acquired knowledge and abilities to solve problems in new or unfamiliar environments within broader contexts, including the ability to integrate multidisciplinary R & D in the business environment.
- CG3: To be able to integrate knowledge in order to state opinions using information that even incomplete or limited, include reflecting on social and ethical responsibilities linked to the application of their knowledge.
- CG4: To have the ability to communicate the findings to specialist and non-specialist audiences in a clear and unambiguous way.

CG5: To have the appropriate learning skills to enable them to continue studying in a way that will be largely self-directed or autonomous, and also to be able to successfully undertake doctoral studies.

Specific:

CE2: To model specific ingredients and make appropriate simplifications in the model to facilitate their numerical treatment, maintaining the degree of accuracy, according to previous requirements.

CE3: To determine if a model of a process is well made and well mathematically formulated from a physical standpoint.

CE4: To be able to select a set of numerical techniques, languages and tools, appropriate to solve a mathematical model.

CE5: To be able to validate and interpret the results, comparing them with visualizations, experimental measurements and functional requirements of the physical engineering system.

WILL YOU BE USING A VIRTUAL PLATFORM? No.

WILL YOU BE USING ANY SPECIFIC SOFTWARE? Yes. ProjectLibre.

CRITERIA FOR THE 1ST ASSESSMENT OPPORTUNITY

Students will need to carry out a case study presented by the teachers.

The students who fail continuous assessment are entitled to take a final exam.

CRITERIA FOR THE 2ND ASSESSMENT OPPORTUNITY

Based on the results obtained in the 1st opportunity.
