

Course guide

310505 - 310505 - Process and Project Management. PMI

Last modified: 09/01/2024

Unit in charge: Barcelona School of Building Construction
Teaching unit: 753 - TA - Department of Architectural Technology.

Degree: MASTER'S DEGREE IN BUILDING CONSTRUCTION MANAGEMENT (Syllabus 2015). (Compulsory subject).

Academic year: 2023 **ECTS Credits:** 5.0 **Languages:** Spanish

LECTURER

Coordinating lecturer: Leiva Navarro, Joan

Others: Avellaneda Lopez, Alina
Leiva Navarro, Joan

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

CE03MUGE. Manage strategic and infrastructure planning and programming and apply to the management, planning and control of operations.

CE12MUGE. Apply management models suitable for edification processes

Generical:

CG2MUGE. Manage projects in the field of construction.

Transversal:

01 EIN. ENTREPRENEURSHIP AND INNOVATION: Knowing about and understanding how businesses are run and the sciences that govern their activity. Having the ability to understand labor laws and how planning, industrial and marketing strategies, quality and profits relate to each other.

05 TEQ. TEAMWORK. Being able to work as a team player, either as a member or as a leader. Contributing to projects pragmatically and responsibly, by reaching commitments in accordance to the resources that are available.

Basic:

CB8. The students must be able to integrate knowledges and front to the complexity to formulate opinions from an information which, being incomplete or limited, includes reflections about the social and ethical responsibilities linked to the application of their knowledges and opinions.

TEACHING METHODOLOGY

Master class.

Expository-participatory class

Practices.

Case studies.

LEARNING OBJECTIVES OF THE SUBJECT

At the end of the course the student should be able to:

- Know the project management systematics according to PMI models.
- Acquire the ability to structure the activities that comprise a project.
- Manage complex projects in the building process.

STUDY LOAD

Type	Hours	Percentage
Hours medium group	5,0	4.00
Guided activities	7,5	6.00
Hours large group	17,5	14.00
Hours small group	5,0	4.00
Self study	90,0	72.00

Total learning time: 125 h

CONTENTS

CONTENT 1. INTRODUCTION TO PROJECT MANAGEMENT

Description:

In this content the students work:

- Introduction to the concept of project and project management.
- Framework.
- Introduction the standard for project management.
- Project management principles.
- Project performance domains.
- Introduction to the processes in the project management.

Specific objectives:

Introductory topic of the subject.

Understand the basic principles of project management according to the model of Project Management Institute.

Related activities:

Activity 1. Practical case 1.

Activity 2. Study Case.

Activity 3. Classroom Activity.

Full-or-part-time: 58h

Theory classes: 8h

Practical classes: 6h

Guided activities: 7h

Self study : 37h

CONTENT 2. MANAGEMENT OF BUILDING PROCESSES

Description:

In this content the students work:

- Analysis of the phases of building process.
- Application of the concepts of project management into the phases of building process.

Specific objectives:

- Understand the processes of the building cycle.
- Apply the project management in the processes of the building cycle.

Related activities:

Activity 4. Practical case 2.

Full-or-part-time: 67h

- Theory classes: 7h
- Practical classes: 9h
- Guided activities: 8h
- Self study : 43h

GRADING SYSTEM

Final exam: 25%

Activities: 75%

- Activity Practical Case 1: 25%
- Activity Practical Case 2: 25%
- Activity Case Study: 10%
- Activity Classroom: 15%

BIBLIOGRAPHY

Basic:

- Construction extension to the PMBOK guide . Newtown Square, Pennsylvania : Project Management Institute, Inc, [2016]. ISBN 9781628250909.
- Practice standard for work breakdown structures. Third edition. ©2019. ISBN 9781628256208.
- Process groups : a practice guide. ©2023. ISBN 9781628257847.
- El Estándar para la dirección de proyectos ; y Guía de los fundamentos para la dirección de proyectos: (guía del PMBOK®). Séptima edición. Newtown Square, Pennsylvania : Project Management Institute, Inc, [2021]. ISBN 9781628256796.
- Guía de los fundamentos para la dirección de proyectos : (guía del PMBOK®) . Sexta edición. Newtown Square : Project Management Institute, [2017]. ISBN 1628251948.
- Asociación Española de Normalización y Certificación. UNE-ISO 21500:2022 Gestión de proyectos, programas y carteras de proyectos. Contexto y conceptos. Madrid: AENOR, 2022.

Complementary:

- Practice standard for scheduling. Third edition. Newtown Square, Pennsylvania : Project Management Institute, 2019. ISBN 9781628255621.
- The PMI guide to business analysis. Newtown Square, Pennsylvania : Project Management Institute, Inc, 2017. ISBN 9781628254730.
- Horine, Greg. Manual imprescindible de gestión de proyectos. Madrid: Anaya Multimedia, cop. 2010. ISBN 9788441526075.
- Pardo Álvarez, José Manuel. Configuración y uso un mapa de procesos. Madrid: Aenor, 2012. ISBN 978-84-8143-796-6.