

60561 - Rural infrastructure

Información del Plan Docente

Academic Year	2016/17
Academic center	201 - Escuela Politécnica Superior
Degree	546 - Master in Agricultural Engineering
ECTS	6.0
Course	1
Period	First semester
Subject Type	Compulsory
Module	---

1.Basic info

1.1.Recommendations to take this course

1.2.Activities and key dates for the course

2.Initiation

2.1.Learning outcomes that define the subject

2.2.Introduction

3.Context and competences

3.1.Goals

3.2.Context and meaning of the subject in the degree

3.3.Competences

3.4.Importance of learning outcomes

4.Evaluation

5.Activities and resources

5.1.General methodological presentation

The learning process designed for this course is based on the combination of theoretical sessions, problem-based learning and practical sessions (software).

5.2.Learning activities

The methodologies that student must follow to achieve the learning outcomes are:

- Theoretical sessions

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- Problem-based learning
- Practical sessions (software)
- Independent learning
- Evaluation

5.3.Program

Theory programme

1. Floor slabs
2. Earth pressures and retaining walls
3. Concrete tanks
4. Geotechnical report
5. Ground slabs
6. Concrete foundations

Programme of Practicals

Using structural calculation software:

1. Floor slabs
2. Earth pressures and retaining walls
3. Ground slabs
4. Foundations

5.4.Planning and scheduling

Week	Theoretical sessions (h)	Practical sessions (h)	Individual learning (h)	Total (h)
1	2	2	6	10
2	2	2	6	10

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3	2	2	6	10
4	2	2	6	10
5	2	2	6	10
6	2	2	6	10
7	2	2	6	10
8	2	2	6	10
9	2	2	6	10
10	2	2	6	10
11	2	2	6	10
12	2	2	6	10
13	2	2	6	10
14	2	2	6	10
15	2	2	6	10
Total	30	30	90	150

5.5. Bibliography and recommended resources

- Calavera Ruiz, José. Muros de contención y muros de sótano / J. Calavera . 3ª. ed. Madrid : INTEMAC (Instituto Técnico de Materiales y Construcciones), D.L.2001
- Calavera Ruiz, José. Cálculo, construcción, patología y rehabilitación de forjados de edificación : unidireccionales y sin vigas- hormigón metálicos y mixtos / J. Calavera . 5ª ed. [de acuerdo con la nueva instrucción EFHE (2002)] Madrid : INTEMAC. Instituto Técnico de Materiales y Construcciones, D.L. 2002
- Calavera Ruiz, José. Cálculo de estructuras de cimentación / J. Calavera . 4a. ed. [Madrid] : INTEMAC (Instituto Técnico de Materiales y Construcciones), D.L. 2000
- Jimenez Montoya Hormigón armado / Álvaro García Meseguer, Francisco Morán Cabré, Juan Carlos Arroyo Portero. 15ª ed. Madrid : Gustavo Gili, 2009
- Jofré Ibáñez, Carlos. Manual de pavimentos industriales / Carlos Jofré Ibáñez, Julio José Vaquero García . Madrid : Instituto Español del Cemento y sus Aplicaciones , D.L. 2000