

60401 - Obtaining and Organising Geographical Information

Información del Plan Docente

Academic Year	2016/17
Academic center	103 - Facultad de Filosofía y Letras
Degree	352 - Master's in Geographical Information Technology for Territorial Development: Geographical Informations Systems and Teledetection
ECTS	10.0
Course	1
Period	Annual
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 and teaching methodology developed in the course is aimed to promote the attainment of its objectives. A wide range of teaching and learning activities is implemented, such as interactive lessons, practical exercises, individual or group activities, directed activities and private study.

A high level of student participation will be required from all students throughout the course.

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Extensive material will be available *via* the Moodle site of the course. This offers a variety of resources including a repository of the lecture notes used in class as well as other forms of course-specific materials.

5.2.Learning activities

2.1. The geographic information and its modelling through information technologies: principles and elements.

Lecture sessions: 10 hours

Private study- Directed activities: 15 hours

2.2. Principles, instruments and methodologies for acquiring spatial information: topography and GPS.

Lecture sessions: 10 hours

Practical activities: Interactive, individual or group activities: 13.5 hours

Field Work: 5 hours

Directed activities: 5 hours

Private study: 17 hours

2.3. Principles, instruments and methodologies...: sensors/platforms.

Lecture sessions: 5 hours

Practical activities: Interactive, individual or group activities: 2 hours

Directed activities: 5 hours

2.4. Principles, instruments and methodologies...: field spectrometry.

Lecture sessions: 2.5 hours

Practical activities: Interactive, individual or group activities: 5 hours

Field Work: 2.5 hours

Directed activities: 5 hours

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Private study- Directed activities: 8 hours

Assessment: 50 minutes

2.5. Creation and management of geographic databases: basic database concepts, database design and implementation, SQL.

Lecture sessions: 20 hours

Private study- Directed activities:: 29 hours

Assessment: 1 hour

2.6. Creation and management of geographic databases: edition in ArcMap, access to share databases.

Practical activities: Interactive, individual or group activities: 15 hours

Private study- Directed activities: 22.5 hours

2.7. Creation and management of geographic databases: georeferencing satellite images.

Lecture sessions: 5 hours

Practical activities: Interactive, individual or group activities: 5 hours

Private study- Directed activities: 3 hours

Assessment: 50 minutes

2.8. Spatial data infrastructures (SDI): standards and metadata.

Lecture sessions: 10 hours

Practical activities: Interactive, individual or group activities: 5 hours

Field Work: 5 hours

Private study- Directed activities: 22 hours

Assessment: 50 minutes

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5.3.Program

- 2.1. The geographic information and its modelling through information technologies: principles and elements.
- 2.2. Principles, instruments and methodologies for acquiring spatial information: topography and GPS.
- 2.3. Principles, instruments and methodologies...: sensors/platforms.
- 2.4. Principles, instruments and methodologies...: field spectrometry.
- 2.5. Creation and management of geographic databases: basic database concepts, database design and implementation, SQL.
- 2.6. Creation and management of geographic databases: edition in ArcMap, access to share databases, ArcPAD.
- 2.7. Creation and management of geographic databases: georeferencing satellite images.
- 2.8. Spatial data infrastructures (SDI): standards and metadata.

5.4.Planning and scheduling

Sessions will be developed during the first months of the course, before the Christmas holidays period. Test and practical works will be conducted in the first of the three assessment periods. Students will also have the June and September exam periods.

For further details concernig the timetable, classroom and other information of the course please refer to the

"Facultad de Filosofía y Letras" web site (<https://fyl.unizar.es/horario-de-clases#overlay-context=horario-de-clases>)

5.5.Bibliography and recomended resources

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