uc3m Universidad Carlos III de Madrid

Mapping and GIS applications in tourism

Academic Year: (2023 / 2024) Review date: 25-04-2023

Department assigned to the subject: Humanities: History, Geography and Art Department

Coordinating teacher: VELAZQUEZ CHENA, LUIS RICARDO

Type: Compulsory ECTS Credits: 3.0

Year: 1 Semester: 2

OBJECTIVES

COMPETENCES

Possess and understand knowledge that provides a basis or opportunity to be original in the development and / or application of ideas, often in a research context.

That students know how to apply the knowledge acquired and their ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their area of study.

That students are able to integrate knowledge and face the complexity of formulating judgments based on information that, being incomplete or limited, includes reflections on social and ethical responsibilities linked to the application of their knowledge and judgments.

That the students know how to communicate their conclusions and the knowledge and ultimate reasons that sustain them to specialized and non-specialized audiences in a clear and unambiguous way.

That the students have the learning skills that allow them to continue studying.

Analyze the different indicators that allow knowing the relevance of Spanish tourism in the world. Interpret the ways to promote the growth of the national, regional and local tourist offer, starting from the cultural and natural resources.

That the students interpret the keys of the territorial balance, and the cultural integration of the marginalized zones.

Identify the tourism fabric as the integration of natural and cultural assets, establishing relationships of commitment and balance between both realities.

Apply the ability to work as a team on topics related to cultural and natural heritage.

Properly handle the use of innovative concepts linked to tourism management.

Define a work methodology, from fieldwork to the interpretation and publication of results in the field of tourism resource management.

Evaluate the strategic role of tourism for the economic development of the peoples and the value and active conservation of natural and cultural resources.

Analyze the sources of information for the analysis of spaces and tourist activities.

Promote spaces for different types of tourism and tourists, emphasizing, in particular, cultural and environmental aspects through paths of discovery and integration.

Train to interpret social and cultural diversity.

Identify the specific tools to develop tourist activities and products based on environmental and cultural resources without jeopardizing the conservation of resources and the sustainability of tourism.

Value the critical spirit for a permanent improvement of the tourist product, taking the initiative in the renovation and permanent updating of the offers.

Apply the economic, legal, social and political variables that intervene in Tourism, for the promotion of goods of cultural and natural interest.

Decide on the planning of tourist spaces.

Evaluate the adequate resources to promote a space or a specific cultural asset.

Analyze states of conservation and quality of cultural assets linked to the tourist world

Demonstrate knowledge in tourism.

Identify problems and potentialities of tourism resources and spaces.

Write diagnoses and strategies for tourist territories and destinations.

RESULT OF LEARNING

This Matter will provide students with the necessary knowledge to value the resources of a territory from a tourism perspective. After their studies, they must be trained for territorial recognition of a space, detect their tourism potential, and design instruments for localization, planning, management, communication and dissemination of natural resources through offers of different cultural and natural tourism products

DESCRIPTION OF CONTENTS: PROGRAMME

- Topic 0. Basic cartographic concepts
- Topic 1. Basic concepts of ICT and Geographic Information System (GIS)
- Topic 2. Utilities of GIS in the tourism sector
- Topic 3. The databases applied to the Geographic Information System
- Topic 4. SIG and its application in the tourism sector. Featured examples. Limitations and trends of GIS linked to tourism.

*Visit to the historic center of Madrid 2 groups (Workshop 4)

LEARNING ACTIVITIES AND METHODOLOGY

FORMATION ACTIVITIES

- A. Master conferences
- B. Practical classes in the classroom and conducting 4 workshops with delivery of the work individually.
- C. Elaboration of an individual student work based on field work
- D. Tutoring

TEACHING METHODOLOGIES:

Attendance On-campus and Attendance Blended Learning.

Presentations in the teacher's class with computer and audiovisual media support, in which the main concepts of the subject are developed and the bibliography is provided to complement the learning of the students.

Carrying out four workshops in the computer room to apply the knowledge explained in the theoretical classes and develop individual work. Use of cartographic applications in class and in workshops individually:

- Qgis Geographic Information System
- Google My Maps, uMap, ArcGIS story Maps, etc.
- Google Earth.
- Spatial Data Infrastructure of Spain (IDEE),
- Mobile applications Mapas de España (IGN).

Elaboration of an individual student work (workshop 4) based on field work, using mobile applications for track creation. .

Exhibition in class of the work, in group and / or individual, developed by the students. Discussion

groups and networking.

ASSESSMENT SYSTEM

Classwork: 50%

Individual final work: 40%

Up to 10% will be penalized in case of not attending the master classes and workshops (continuous assessment).

Final exam (delivery of a job / task): 10%

(It is essential to take the final exam to pass the subject).

% end-of-term-examination: 10

% of continuous assessment (assigments, laboratory, practicals): 90

Evaluation system of the extraordinary call: completion of a task.

% end-of-term-examination: 10

% of continuous assessment (assignments, laboratory, practicals...): 90

BASIC BIBLIOGRAPHY

- Instituto Geográfico Nacional Conceptos cartográficos. Recuperado de http://www.ign.es/web/resources/cartografiaEnsenanza/conceptosCarto/descargas/Conceptos_Cartograficos_def.pdf, Instituto Geográfico Nacional.
- ORTEGA PÉREZ, E. Los Sistemas de Información Geográfica, Teoría y Práctica, Dextra Editorial, S.L., 2016
- SANTOS PRECIADO, J.M. Sistemas de Información Geográfica, Universidad Nacional de Educación a Distancia, Edición digital: abril de 2020