

60418 - Visualisation, presentation and spreading of 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	6.0
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 range of teaching and learning activities is implemented, such as interactive lessons, practical exercises with appropriate software 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, a course syllabus as well as other forms of course-specific materials.

5.2.Learning activities

Map design and production

Lecture sessions: 10 hours

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

Directed activities: 20 hours

Private study: 12.5 hours

Cartographic Aesthetics and Map Design

Lecture sessions: 9 hours

Practical activities: Interactive, individual or group activities: 6 hours

Directed activities: 15 hours

Private study: 5 hours

Web Mapping and virtual environments

Lecture sessions: 5 hours

Directed activities: 17.5 hours

Private study: 10 hours

Map Animation

Lecture sessions: 5 hours

Directed activities: 7.5 hours

Private study: 5 hours

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The use of 3D

Lecture sessions: 5 hours

Directed activities: 7.6 hours

Interactive maps

Lecture sessions: 5 hours

Directed activities: 5 hours

5.3.Program

1. Map design and production
2. Cartographic Aesthetics and Map Design
3. Web Mapping and virtual environments
4. Map Animation
5. The use of 3D
6. Interactive maps

5.4.Planning and scheduling

The course is divided into 6 thematic blocks. The length of a course is two weeks during the second semester. Each session takes 2.5 hours.

For further details concerning 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 recommended resources

- Bertin, Jacques. Semiology of graphics : diagrams, networks, maps / Jacques Bertin ; translated by William J. Berg. Redlands, Calif. : ESRI Press : Distributed by Ingram Publisher Services, 2011
- Brewer, Cynthia A.. Designed maps : a sourcebook for GIS users / Cynthia A. Brewer . - 1st. ed. California : ESRI, 2008
- Brewer, Cynthia A. Designing better maps : a guide for GIS users / Cynthia A. Brewer. Designing better maps : a guide for GIS users / Cynthia A. Brewer.
- Sémiologie et conception cartographique / sous la direction de Jean Denègre Paris : Hermes Science Publications, 2005
- The map reader : theories of mapping practice and cartographic representation / edited by Martin Dodge, Rob Kitchin and Chris Perkins Oxford : Willey-Blackwell, 2011
- MacEachren, Alan M.. How maps work : representation, visualization, and design / Alan M. MacEachren New York ; London : Guilford Press, cop. 2004
- Peterson, Gretchen N.. GIS cartography : a guide to effective map of design / Gretchen N. Peterson. . Boca Raton : CRC Press, c2009.
- Poidevin, Didier. La carte moyen d'action : conception - réalisation / Didier Poidevin. Paris : Ellipses, cop. 1999.
- Elements of cartography / Arthur H. Robinson...[et al.] . - 6th ed. New York [etc.] : John Wiley & sons, cop. 1995
- Thematic cartography and geographic visualization / Terry A. Slocum ... [et al.] . - 2nd. ed. Upper Saddle River, NJ : Pearson/Prentice Hall, cop. 2005
- Tyner, Judith A.. Principles of map design / Judith A. Tyner New York [etc] : Guilford, 2010

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- Zanin, Christine. Savoir faire une carte: aide à la conception et à la réalisation d'une carte thématique univariée / Christine Zanin, Marie-Laure Trémélo. Paris : Belin, cop 2003
- Stamato Delazari, L. . ?Is an electronic atlas a Geographic Information System??, Congreso Internacional de Geodesia y Cartografía, Caracas, 2002
- Miranda Guerrero, Ruth. ?Planteamiento metodológico hipermedial para el desarrollo de una maqueta multimedia de clima de España?. En: Tecnologías geográficas para el desarrollo sostenible [Recurso electrónico] : 20 al 22 de septiembre de 2000 / [editoras, Inmaculada Aguado, Montserrat Gómez]. Datos [Alcalá de Henares] : Servicio de Publicaciones, Universidad de Alcalá, [2000], p. 676-689
- Díaz, Paloma. De la multimedia a la hipermedia / Paloma Díaz, Nadia Catenazzi, Ignacio Aedo . 1º ed. Madrid : RA-MA, 1996
- Codina, L.. ?H de Hypertext o la teoría de los hipertextos revisada?, Cuadernos de Documentación Multimedia, núm. 6-7, 1997-1998
- Koop, O.. ?Developing Electronic Altases : An Update!?. En: Seminar on Electronic Atlases and National Atlas Information Systems in the Information Age Reykjavik : University of Iceland, 1998
- Martínez, S.. ?Modelado de documentación multimedia e hipermedia?, Cuaderno de Documentación Multimedia, núm. 7, pp. 211-219
- Pastor, J. y Saorín, T.. ?El hipertexto documental como solución a la crisis conceptual del hipertexto : El reto de los documentos cooperativos en redes?, Cuadernos de documentación multimedia, núm. 4, 1994, pp. 199-223.
- Schneider, B.. ?Integration of Analytical GIS-Functions in Multimedia Atlas Information Systems?. En: International Cartographic Conference, 19th. Ottawa : ICA, 1999, pp. 8-15
- Dent, Borden D.. Cartography : thematic map design / Borden D. Dent, Jeffrey S. Torguson, Thomas W. Hodler . 6a ed. New York : McGraw-Hill Higher Education, 2009
- Cairo, Alberto. El arte funcional : infografía y visualización de información / Alberto Cairo . 1ª ed. Madrid : Alamut, 2011
- Cairo, Alberto. Infografía 2.0 : visualización interactiva de información en prensa / Alberto Cairo . 1ª ed. Madrid : Alamut, 2008