

68717 - Cartographic tools for epidemiological and public health studies

Información del Plan Docente

Academic Year 2016/17

Academic center 104 - Facultad de Medicina

Degree 459 - Master's in Public Health

ECTS 2.0

Course

Period Second semester

Subject Type Optional

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 GIS software, group activities, and private study.

A high level of student participation will be required from all students throughout the course. A portfolio is required from any student, which consist of a collection of learner's work done over the course and shows development of their knowledge acquired.



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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

Lecture sessions: 10 hours

Interactive, individual or group activities: 8 hours

Directed activities: 3.24 hours

5.3.Program

The lecture course will address the following main issues:

- 1.- The Geographic and Cartographic Framework
- 2.- The cartographic process
- 3.- Planning and Composition
- 4.- Base map and thematic data
- 5.- Symbolization
- 6.- Decision-making process
- 7.- Layout Design
- 8.- Critique of maps
- 9.- The use of maps in Epidemiology and Public Health

5.4. Planning and scheduling

The course is divided into 9 thematic blocks. The length of the course is one week during the second semester. Each session takes five hours. For further details concerning the timetable, classroom and other information of the course please refer to the "Facultad de Medicina" web site (http://medicina.unizar.es/mastersp)

5.5.Bibliography and recomended resources

Bertin, Jacques. Semiology of graphics: diagrams, networks, maps / Jacques Bertin. 1967



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Brewer, Cynthia A., Designing better maps: a guide for GIS users / Cynthia A. Brewer, Redlands, Calif.: ESRI Press, 2005

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

Thematic cartography and geovisualization / Terry A. Slocum ... [et al.] . - 3rd ed. Upper Saddle River, NJ: Pearson Prentice Hall, cop.200

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, D.L. 2010

Brewer, Cynthia A., Designed maps: a sourcebook for GIS users / Cynthia A. Brewer. - 1st. ed. California: ESRI, 2008

Denègre, Jean. Sémiologie et conception cartographique / Jean Denègre.

Elements of cartography / Arthur H. Robinson...[et al.] . - 6th ed. New York [etc.] : John Wiley & sons, cop. 1995

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

The map reader: theories of mapping practice and cartographic representation / edited by Martin Dodge, Rob Kitchin and Chris Perkins Oxford: Willey-Blackwell, 2011

Tyner, Judith A., Principles of map design / Judith A. Tyner New York [etc]: Guilford, 2010