

# Open Contents Modules Available for E-Learning Multimedia Cartography and Location Based Services

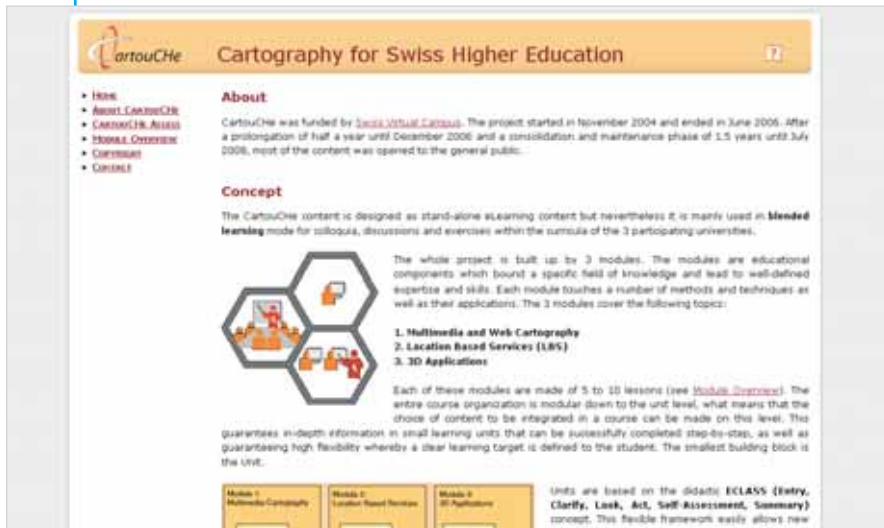


Fig. 1. CartouCHE homepage  
Sl. 1. Početna stranica CartouCHE

Swiss Virtual Campus (SVC) is a federal program, which began in 2000th and was completed in 2008th. Its goal was to improve Internet-based learning in Swiss higher education institutions. One of the projects within the SVC was dedicated to cartography: *CartouCHE* (Cartography for Swiss Higher Education). Project partners were the Institute of Cartography Swiss Federal Institute of Technology Zurich (*ETH*), Department of Geography University of Zurich and Institute of Geomatics Engineering Professional School Nordwestschweiz. The results of the project are three modules for e-learning: *Multimedia Cartography*, *Location Based Services* and *3D Applications*. Modules are designed for learning at graduate level (Master level). Since 2008 modules *Multimedia Cartography* and *Location Based*

*Services* are available free online under a Creative Commons Licence. This means that after registration programs are free to download, distribute and adapt, but only for non-commercial purposes. It is only necessary to quote *CartouCHE* as the author. These two modules can be downloaded at <http://www.e-cartouche.ch> (Fig. 1). Contents can be viewed in different browsers (e.g. Internet Explorer, Safari, Firefox, Opera), operating under different operating systems (e.g. Windows, Linux, Mac) and other than English are available on a dozen other languages.

*Multimedia Cartography* module consists of ten chapters, and *Location Based Services* module of five chapters. Each chapter is scheduled for one hour lecture.

*Multimedia Cartography* module consists of the following ten chapters:

1. Introduction to Multimedia Cartography
2. Computer Graphics
3. Internet Techniques and Web Formats
4. Planning Multimedia Projects
5. Data Storage and Structure
6. Cartographic Design for Screen Maps
7. Navigation - Concepts and Tools
8. Graphical User Interface - Layout and Design
9. Animation and Interactivity
10. Standardisation and Web-services

and *Location Based Services* module of the following five chapters:

1. Foundations of Location Based Services
2. Techniques for LBS Cartography
3. Designing Maps for LBS
4. Solutions for LBS Maps
5. WebPark: LBS in Action.

Fig. 2 shows the initial section of interactivity in the first chapter Introduction to Multimedia Cartography. From academic year 2010/11 on, lectures on *Multimedia Cartography* at the Master level at the Faculty of Geodesy, University of Zagreb, will be accompanied by the mentioned module for multimedia cartography.

Nedjeljko Frančula  
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## Moduli otvorenoga koda za e-učenje multimedijске kartografije i lokacijskih usluga

Švicarski virtualni kampus (Swiss Virtual Campus – SVC) je savezni program, započet 2000. i završen 2008. kojemu je cilj bio unapređenje internetski utemeljenog učenja u švicarskim institucijama visokog obrazovanja. Jedan od projekata u sklopu SVC-a bio je posvećen kartografiji: *CartouCHe* (*Cartography for Swiss Higher Education*). Partneri na projektu bili su Institut za kartografiju Švicarske visoke tehničke škole u Zürichu (*ETH*), Odjel za geografiju Sveučilišta u Zürichu i Institut za geomatičko inženjerstvo Stručne škole *Nordwestschweiz*. Rezultat rada na projektu su tri modula za e-učenje: *Multimedia Cartography*, *Location Based Services* i *3D Applications*. Moduli su predviđeni za učenje na diplomskoj razini (*Master level*). Od 2008. moduli *Multimedia Cartography* i *Location Based Services* slobodno su dostupni na internetu pod *Creative Commons Licence*. To znači da se nakon registracije programi mogu besplatno preuzeti, distribuirati i adaptirati, ali samo za nekomercijalne svrhe. Jedino je nužno uvijek navesti kao autora *CartouCHe*. Navedena dva modula mogu se preuzeti na adresi <http://www.e-cartouche.ch> (sl. 1). Sadržaji se mogu pregledavati na različitim preglednicima (npr. Internet Explorer, Safari, Firefox, Opera), rade pod različitim operativnim sustavima (npr. Windows, Linux, Mac) i osim na engleskom dostupni su na desetak drugih jezika.

Modul *Multimedia Cartography* sastoji se od deset poglavlja, a modul *Location Based Services* od pet poglavlja. Svako poglavlje predviđeno je za jednosatno predavanje.

Modul *Multimedia Cartography* sastoji se, u prijevodu na hrvatski, od ovih deset poglavlja:



Fig. 2. Interactivity homepage  
Sl. 2. Početna stranica o interaktivnosti

- |   |  |
|---|--|
| 1. Uvod u multimedijску kartografiju                  | 1. Osnove lokacijskih usluga                     |
| 2. Računalna grafika                                  | 2. Tehnike za kartografiranje lokacijskih usluga |
| 3. Internetske tehnike i web-formati                  | 3. Oblikovanje karata za lokacijske usluge       |
| 4. Planiranje multimedijških projekata                | 4. Rješenja za karte lokacijskih usluga          |
| 5. Pohrana i struktura podataka                       | 5. WebPark: lokacijske usluge u akciji.          |
| 6. Kartografsko oblikovanje karata na ekranu          |  |
| 7. Navigacija – koncepti i alati                      |  |
| 8. Grafičko korisničko sučelje – oprema i oblikovanje |  |
| 9. Animacija i interaktivnost                         |  |
| 10. Standardizacija i web-servisi                     |  |

a modul *Location Based Services* od ovih pet poglavlja:

Na sl. 2 je početna stranica odjeljka o interaktivnosti u sklopu prvog poglavlja *Uvod u multimedijску kartografiju*. Od ak. god. 2010/11 na Geodetskom fakultetu Sveučilišta u Zagrebu predavanja iz kolegija *Multimedijška kartografija* na diplomskom studiju održavat će se s pomoću opisanog modula za multimedijску kartografiju.

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