

Geographic Information Technology Training Alliance (GITTA): Pro-viding Open Educational Resources for Higher Education in GIS and Cartography

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GITTA (Geographic Information Technology Training Alliance) is a project that offers e-learning content as Open Educational Resources (OER). Thus, the content is made available on the project homepage www.gitta.info free of charge, through the so-called 'by-nc-sa' Creative Commons license. Users can freely use, copy, modify, and distribute GITTA content as long as they acknowledge the origin in the GITTA project (by), as long as the content is not used for commercial purposes (non-commercial = nc), and as long as modifications of the content by the user are again made available to the public under the same type of license (share alike = sa).

GITTA content was originally developed by a consortium of ten institutes at seven Swiss universities. Content is in large parts multilingual, with English, German, and French materials. Two content types are offered, lessons and case studies. A pool of over 40 e learning lessons is available today in the following thematic areas: GI Systems, Data Capture, Data Management, Spatial Modelling, Spatial Analysis, and Cartographic Presentation. GITTA lessons are mainly intended to educate students in the theoretical concepts and methods underlying GIS, complementing or even replacing traditional face-to-face teaching. Every lesson accounts for 2 to 3 hours of learning time for the student. The total amount of work for all of the lessons provided in GITTA corresponds to about 15 credit points in ECTS (European Credit Transfer System, where 1 credit point corresponds to 25-30 h of work).

Besides the theory modules, six case studies (Fig. 2) have been created in which students are confronted with realistic sample cases that are relevant to the practice of GIST. In these case studies, the practical problem solving skills of the students are trained. In each case study, a description of the assignment and original data material is provided. The student is then expected to develop solutions for solving the assignment using GIS tools. For example, the assignment of one case study consists in modelling the potential habitat of given animal species for a study area, using methods of GIS-based multi-criteria analysis. It usually takes the student around 30h to solve such a case study.

GITTA content is based on an XML application named eLML (e-Learning Markup Language, www.elml.org), providing standardised and flexible transformation into different output formats and/or presentation designs (XML technology strategy). It is possible to create content packages such as IMS or SCORM, which can be easily imported into any modern Learning Management System (LMS) such as Moodle, Blackboard, or OLAT. Alternatively, GITTA content can be accessed by linking directly to the HTML version available through the GITTA homepage (www.gitta.info). Hence, platform independence is truly given, so that GITTA content is accessible to a large, worldwide community.

The GITTA content can be used in two different ways. First, students and teachers can access the content for free just by subscribing themselves to the GITTA newsletter. They will then receive an email message with the URL that allows free access to GITTA content. Second, individuals or institutions who like to edit or modify the content of particular lessons according to their specific needs or who want to create new lessons are allowed to do so as long as they become, for a nominal

fee, full active members of the GITTA Association. This will grant them the right to contribute their content to the project and vote on the further evolution of GITTA. The GITTA Association was founded in 2006 as an instrument to coordinate the GITTA project and as a vehicle to integrate new authors (see the bylaws on www.gitta.info/association).

In 2008 GITTA was among the winners of the Medida Prix, the most important international award for new media didactics in Europe. The prize money is intended to be used for extending the GITTA network, in particular by sponsoring the translation of lessons and case studies to additional commonly spoken languages, such as Spanish and Portuguese. To facilitate such translation projects, however, we would welcome the collaboration with individuals and/or groups who are experts in GIS and/or cartography and native speakers of the target language concerned. We therefore extend a cordial invitation for any form of collaboration, formal or informal, and we hope that we may soon be able to welcome your proposal for collaboration or application for membership in the GITTA Association.