


Teacher(s)	Vanacker Veerle ;Vanwambeke Sophie ;
Language :	French > English-friendly
Place of the course	Louvain-la-Neuve
Prerequisites	Introductory course in human and physical geography, such as LGEO1221 and LGEO111, or other equivalent course for exchange students in geography. For the realization of the research project, notions of Geographical Information Systems (GIS) and Cartography are necessary.
Main themes	The course is conceived as an integrated project on a pertinent geographical research theme, in particular the risks associated with natural hazards in Belgium.
Learning outcomes	<p>At the end of this learning unit, the student is able to :</p> <p>This course has as double objective to stimulate the students to apply geographical tools and competences in a research project, and at the same to gain transversal skills to complete an effective and productive group project.</p> <p>The competences that will be developed in this course are :</p> <p>Know-how:</p> <ul style="list-style-type: none"> • Capacity to apply tools and techniques of cartography, geographical information systems and statistics in a research project • Capacity to perform a rigorous bibliographic search and to select pertinent information (including historical maps) 1 • Capacity to integrate different geographic information sources (historical maps, city maps, aerial photographs, and census data) <p>Expertise:</p> <ul style="list-style-type: none"> • Synthesize the outcomes of a bibliographic study, and know how to document references properly using bibliographic reference software • Communicate orally and in writing precisely the objectives, materials and methods, results and conclusion of a research project • Understand and use the vocabulary of the discipline in oral and written communications • Work as a team on a common project
Evaluation methods	<p>Preparing and presenting a comment on a designated place based on historical maps (1 preparation for each student across all excursions): 20%</p> <p>Field notes and drawings will be sorted and cleaned up and handed back to the teachers within a week of the excursion. This stands as the report. They will be handed in the pigeonhole of the teaching assistant on the 3rd floor in the Mercator building. 30%</p> <p>Oral exam during the session on the identification of rocks and minerals collected during the excursions: 20%</p> <p>Oral presentation during the session of a story map focused on one of the places visited based on the field visit as well as the bibliographic and cartographic work in the library: 30%</p> <p>Second session : marks of the presentation of historic maps and field notes are attached to all session. Oral exams will have to be presented again.</p>
Teaching methods	<p>Field teaching.</p> <p>Activities in work room and at the library.</p> <p>Presentations to peers on the field.</p> <p>Taking part in the field excursion is compulsory. Any absence must be justified as soon as possible with a medical certificate.</p>
Content	<p>This course is centered on a current geographical issue - the risks linked to natural hazards - and covers different aspects of geography, including physical, environmental and human aspects. Based on bibliographic research on flood risks and hazards in the context of global changes, teams of 2 – 3 students develop a specific research question which is developed in a geographical region in Wallonia. For 10 weeks, the teams analyze the natural and anthropogenic components of a landscape using historical maps, aerial photographs and satellite images, and digital terrain, soil, and geology data in GIS. Flood hazard mapping is based on topographic and soil information, and complemented with an analysis of hydrometeorological data to identify flood levels. It is followed by a risk</p>

	assessment and flood risk mapping. The final outcomes are reported in a scientific paper which is organized according to the principles of a scientific publication.
Inline resources	All useful resources are on Moodle.
Other infos	Students must register to LGEO1251 along (or should have followed and passed it).
Faculty or entity in charge	GEOG

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Additionnal module in Geography	APPGEOG	4		
Additionnal module in Geography : global change and transition management	APPGEO	4		