

## Earth's history

6.00 credits

lgeo1251

2022

30.0 h + 60.0 h

Q2

Teacher(s)	Vanacker Veerle ;				
Language :	French				
Place of the course	Louvain-la-Neuve				
Prerequisites	The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.				
Main themes	Topics treated in lectures include : - the constituent minerals of rocks - the different types of rocks and their mode of occurrence - the mode of formation of these rocks by magmatic, sedimentary and metamorphic processes - the deformation of the earth's crust and the resulting structures, at all scales - the chronological criteria used to recontruct the history of the earth's crust - the geology of Belgium and neighbouring areas. The practical classes are devoted to : - geological map-reading and three-dimensional interpretation using cross-sections - macroscopic identification of rocks and their forming minerals.				
Learning outcomes	At the end of this learning unit, the student is able to :				
	<sup>1</sup> The course examines a certain number of basic concepts that underlie important geological phenomena, and that have practical applications in the spatial perception of our environment.				
Evaluation methods	The evaluation is based on a written exam that complements the continuous evaluation during the semester. The written exam will be in the form of open questions and multiple choice questions. The continuous evaluation will take place during the practical sessions, and aims to evaluate the students' capacity to apply their knowledge to identify rock, mineral and fossil specimens, and to interpret geological maps by using structural schemes and geological transects.				
Teaching methods	The teaching activities include 12 lectures with active participation of the students, short individual interventions by the students (with presentation of their favorite fossil), and 12 learning sessions with exercises and practical work. It is possible to follow the lectures via Teams (virtual class live streaming).				
Content	This course covers the history of our planet, and presents a chronology of the geological time including the major geological and paleo-geographical events and biological evolution. The course also resumes a number of geological concepts laying the foundations of current paradigms in earth sciences. During the practical exercises, we will discover geological maps, and read and interpret them in 3D using geological transects. We will also look into the nature of geological formation, and determine rock, mineral and fossil specimens.				
Inline resources	https://moodleucl.uclouvain.be/course/view.php? id=9022				
Other infos	The participation to the practical exercises is mandatory. These are organized only once during an academic year. It is impossible to redo them in the second session. The course LGEO1252B complements the material presented in LGEO1251, and includes field visits of exceptional geological sites in Belgium.				
Faculty or entity in charge	GEOG				

Programmes containing this learning unit (UE)						
Program title	Acronym	Credits	Prerequisite	Learning outcomes		
Minor in Scientific Culture	MINCULTS	6		٩		
Minor in Geography	MINGEOG	6		٩		
Bachelor in Geography : General	GEOG1BA	6	LBIR1130	٩		