


2.00 credits

22.5 h

Q1

Teacher(s)	Alonso Alice (compensates Biolders Charles) ;Alonso Alice (compensates Vanclooster Marnik) ;Biolders Charles ;Goosse Hugues ;
Language :	English > French-friendly
Place of the course	Louvain-la-Neuve
Prerequisites	<i>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.</i>
Learning outcomes	
Evaluation methods	<ul style="list-style-type: none"> • The examination is organized during the examination session. It is a closed-book written examination. • The timetable of the examination is scheduled by the AGRO Faculty secretariat. • The examination is organized, by default, in French. Students who wish to do so may take the examination in English. In the latter case, the student requests permission to conduct the exam in English from the course coordinator by email (charles.biolders@uclouvain.be) at least 1 week before the start of the exam. • For LBIR1328A (2 ECTS): For the theoretical part, the 'Climatology' part counts for 50% and the 'Hydrology' part for 50%. For the 'Hydrology' part, the part of each teacher counts proportionally to the number of sessions taught by each teacher (A. Alonso : 35%; C. Biolders : 15%). • In a second session, the mark from the successful parts of the first session can be considered when the student has obtained at least 14/20 for those successful parts. In the latter case, the student requests reconduction of the mark by writing to the course coordinator by email (charles.biolders@uclouvain.be) at least 48 hours before the start of the exam.
Teaching methods	Theoretical course : Lectures in audience.
Content	<p><u>Bio-climatology</u> Exchange of heat and mass in the boundary layer of the atmosphere, inside plant communities and in the top layer of the soil. Mechanisms of climate formation: atmospheric structure, vertical profiles in the lower layers, lateral movement, atmospheric circulation, clouds and precipitation, greenhouse effect, effects of landscape elements, dynamic and thermal action of relief and vegetation. Influence of human activities on climate and impacts of global climate change.</p> <p><u>Hydrology</u> Water management issues at the plot and watershed scale. The different components of the hydrological cycle (rain, infiltration, runoff, drainage, hypodermic flow, evapotranspiration): process, mathematical description, methods of measurement and interpretation.</p>
Inline resources	The slides and course comments are available on the MOODLE website of the course. Example exam questions are available on the MOODLE site of the course at least 3 weeks before the start of the examination session.
Bibliography	<p>Syllabus : Notes du cours LBIR1328 Climatologie et hydrologie appliquée à l'agronomie et l'environnement Partie I. Climatologie, Hugues Goosse " In, 158. Louvain-la-Neuve, Belgique: Université catholique de Louvain.</p> <p>Ouvrage de référence : Musy, A. 2004. « Hydrologie. Une science de la nature. » Presses polytechniques et universitaires romandes. ISBN : 2-88074-546-2.</p>
Other infos	<p>This course is taught in English, but the support documents of the course (syllabus, slights) are in French and/ or English.</p> <p>Examination can be organised in French or English</p>
Faculty or entity in charge	AGRO

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Environmental Science and Management	ENVI2M	2		
Bachelor in Bioengineering	BIR1BA	2	LBIR1221	