




5.00 credits

30.0 h

Q2

Teacher(s)	Ragone Francesco ;Van Oost Kristof ;Yin Qiuzhen (compensates Van Oost Kristof) ;
Language :	French
Place of the course	Louvain-la-Neuve
Learning outcomes	
Evaluation methods	<p>The learning outcomes are:</p> <ul style="list-style-type: none"> • Understand the main characteristics of the physics of the climate system • Understand the causes and effects of climate change • To put into perspective the contemporary scientific debates in the field • Know how to conduct a scientific reasoning based on the contents of the theoretical course <p>The evaluation consists of a written exam.</p>
Teaching methods	The course is organized into 2 learning activities: (1) lectures and (2) readings of scientific articles.
Content	<p>The course focuses on climate and its changes:</p> <ul style="list-style-type: none"> • The radiative balance • The causes and variations of climate • The traces and lessons of the past • Recent climate change, its sources • Multiple and spatially heterogeneous effects • Mitigating and adapting to climate change <p>The course has the dual objective of acquiring a basic knowledge of climate change, and becoming familiar with the multiple effects and adaptations.</p>
Inline resources	The teaching materials will be available on Moodle
Bibliography	Global Physical Climatology. D.L. Hartmann, Elsevier 2016; Climats, Passe#, pre#sent, futur. M.-A. Me#lie#res & C. Mare#chal, Belin 2020; Climate and the Oceans. G.K. Vallis, Princeton Primers in Climate 2011.
Faculty or entity in charge	GEOG

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Additionnal module in Mathematics	APPMATH	5		
Minor in Scientific Culture	MINCULTS	5		
Minor in Geography	MINGEOG	5		
Bachelor in Geography : General	GEOG1BA	5		