


5.00 credits

30.0 h + 30.0 h

Q2

Teacher(s)	Quinet Muriel ;
Language :	French
Place of the course	Louvain-la-Neuve
Learning outcomes	
Evaluation methods	<p>The evaluation will be based on the mastery of theoretical concepts via a written exam, participation in the course, and presentation of results obtained during the experimental project in the lab or in the field.</p> <p>The written exam will consist of MCQ and open questions and is worth 10/20 of the final grade. Participation in activities during the theory course (wooclap, moodle) is worth 2/20 of the final mark. The mark for the experimental project consists of the evaluation of the protocol and the oral presentation of the work carried out by the team and is worth 8/20 of the final mark (the team mark will be weighted according to the involvement of each member of the group).</p> <p>Participation in the experimental project is essential to validate the teaching unit. In the event of repeated absences, even if justified, the teacher may propose to the jury to oppose registration for the examination relating to the EU in accordance with article 72 of the RGEE</p>
Teaching methods	Theoretical course, group work, fieldwork and laboratory experiments.
Content	<p>A series of theoretical lessons will present the deductive and inductive methods, experimental and observational implemented in the work of the biologist. They will describe how to formulate a hypothesis, design an experiment, use an experimental model and / or make observations, encode and visualize the data, process the results using basic statistical tools, as well as infer a hypothesis or develop a theory on the basis of observations. Students will be trained in the basic functionality of Excel software.</p> <p>Emphasis will be put on the development of critical thinking: assessing the quality of the sources of information, understanding the status of knowledge, especially its provisional nature, recognizing that every assertion must be tested and that any "evidence" must be confronted with critical evaluation, recognizing the limits of hypotheses and the character of knowledge, rigorously interpreting experimental facts, becoming aware of his representations and prejudices in his analysis, and being able to distance himself from his prejudices in his analysis.</p> <p>Students will be asked to implement a strategy to investigate a biological issue in the lab and / or field. Distributed in teams, they will receive an affirmation for which they will have to carry out a bibliographical analysis, design and realize experiments from which they will collect the results in order to produce conclusions.</p>
Inline resources	<p>Moodle website LBIO1116</p> <p>MOOC Penser critique on EdX</p> <p>https://www.edx.org/course/penser-critique</p>
Faculty or entity in charge	BIOL

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Minor in Scientific Culture	MINCULTS	5		
Bachelor in Biology	BIOL1BA	5		