


2.00 credits

20.0 h + 10.0 h

Q1


**This biannual learning unit is not being organized in 2023-2024 !**

Language :	English
Place of the course	Louvain-la-Neuve
Prerequisites	Students should already be familiar with the concepts taught in the following courses: <ul style="list-style-type: none"> <li>• LBIO1112 Biologie des organismes : plantes et animaux ;</li> <li>• LBIO1116 Démarche scientifique en biologie</li> <li>• LBIO1117 Ecologie I</li> </ul>
Main themes	This course is for students who wish to discover or deepen their knowledge about animal behaviour. The diversity of animal behaviour is an inexhaustible source of fascination. First, we present this scientific field also called ethology, its concepts and methods. During the sessions, the students will address issues related to the use of space, the exploitation of food resources and the development of social interactions between individuals. Communication methods and functions will be discussed, as well as reproduction and parental behaviours. Students will also learn the importance of cognitive processes, including the mechanisms of learning, and the importance of personality in animal behaviour. The importance of different rhythms on behaviour will be highlighted by the study of chronobiology.
Learning outcomes	<b>At the end of this learning unit, the student is able to :</b> <ul style="list-style-type: none"> <li>• Master the concepts and methods of ethology</li> <li>• Identify and describe animal behaviours</li> <li>• Understand the underlying neurophysiological mechanisms, including developmental aspects</li> <li>• Formulate testable hypotheses on the adaptive value of behaviours, and their evolution</li> </ul>
Evaluation methods	Continuous assessment during the term (small assignments, quiz, multiple choice questions), associated with a written exam during the session.
Teaching methods	Exceptionally in 2020-2021, students are invited to follow a MOOC (massive open online course). The course will therefore be taken online. This course combines videos, written texts, animations, interviews with scientists. This MOOC composed by Wageningen University is taught in English.
Content	<p><b>Module 1: The science of animal behaviour</b> An introduction to key concepts for studying animal behaviour, including evolution, natural selection, anthropomorphism, and the scientific method.</p> <p><b>Module 2: Learning, cognition and development</b> How animals learn to adjust their behaviour to their environment, and how they use their mental abilities to solve practical problems.</p> <p><b>Module 3: Communication</b> An introduction to the various means animals use to send signals to each other, and how these signals are influenced by the environment and social context.</p> <p><b>Module 4: Finding food and avoiding predators</b> How animals find and exploit food resources, and how they avoid becoming food themselves.</p> <p><b>Module 5: Mating systems and parental care</b> The complexities of creating the next generation, from finding and competing for a mate to rearing offspring.</p> <p><b>Module 6: Living in groups</b> The costs and benefits of living with others, how complex social groups arise, and why some animals forego reproduction to help others breed.</p>
Bibliography	Manuel de support : Éthologie animale : Une approche biologique du comportement. Anne Sophie Darmaillacq, Frédéric Lévy-deboeck Ed. édition 2019.
Faculty or entity in charge	BIOL

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Minor in Scientific Culture	<a href="#">MINCULTS</a>	2		
Additional module in Biology	<a href="#">APPBIOL</a>	2		