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| 4.0 credits | 0 h + 50.0 h | 1+2q |
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| Teacher(s) : | Lefevre Christiane ; Wesselingh Renate ; |
| Language : | Français |
| Place of the course | Louvain-la-Neuve |
| Main themes : | <p>BIO1352A :</p> <p>The students learn the biogeography of Belgium : the different biogeographical zones that are characterized by their climate, bedrock, and topography, and how these factors influence the composition of the local flora and fauna. In each zone, different successional stages can be found, and the students learn how to link these stages and determine the factors that are responsible for the transitions between stages. The role of human activities in determining the composition of flora and fauna, and the successional stage is an important element of the course.</p> <p>BIO1352B :</p> <p>The students refine their skills in identifying the different taxonomical groups (seed plants, insects, birds), for which they will put together a herbarium and a collection of insects. They have to relate their observations with the environment : soil type, plant community, biogeographical zone, etc. Experiments with germinating the seeds in the soil seed bank teach them how to use this important technique used in determining the restoration potential of a site. Overall, the work will give them the opportunity to fully understand the notions of ecosystems and biodiversity and the problems linked to its conservation.</p> |
| Aims : | <p>This course provides the practical aspects of the courses Ecology of individuals and populations (BIO1351, 1q and Biogeography (GEO1332B, 2q). The practical work has been subdivided in two modules of 4 credits each.</p> <p>The first module, BIO1352A is called "biogeography of Belgium" and accompanies the theoretical course on biogeography. Its aim is to make the students understand how climate, geology, human activities and local conditions influence the vegetation and fauna of a site, with emphasis on the links created by dynamics and succession.</p> <p>The second modules, BIO1352B, is called "biodiversity of the natural environment" and is especially meant to develop the capacities of the student to analyze the environment through identification of the flora and fauna in a biologically interesting site, in order to understand its natural value and ways to conserve it.</p> <p><i>The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".</i></p> |
| Content : | <p>BIO1352A :</p> <p>Several excursions are organized to different regions in Belgium (Brabant Wallon, Ardennes, the coast, Condroz, Fagne-Famenne, Calestienne), where we will visit sites with typical vegetations and animal communities. The students identify the plants present and measure pH of the soil, while information on geology, geomorphology and climate necessary to explain the composition of flora and fauna will be given. The excursions take place in September-October, plus one at the end of November (1st semester), and in April-May (2nd semester).</p> <p>BIO1352B :</p> <p>At the very start of the year (first week of the 1st semester), the students are subdivided into groups of (3-)-4 or 5 people, and each group will get a different biologically interesting site in Brabant Wallon. They will have to make a complete inventory of the flora, complete with a herbarium collection, and they must identify the insects and birds they encounter. Sessions to learn how to identify insects are organized at the start of the 1st semester, plus an excursion to learn to recognize birds by their song in April in the 2nd semester. During winter, the students study the seed bank in soil samples taken in their site, by germinating the seeds in the greenhouse and identifying the seedlings.</p> |

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| <p>Other infos :</p> | <p>BIO1352A :</p> <p>Prerequisite: Some basic knowledge of ecology, and ideally the theoretical biogeography course GEO1332B should be followed during the second semester.</p> <p>Evaluation : a written report is to be made for each region, and the student will have to demonstrate his/her capacity to synthesize the information obtained during the whole course at an oral exam in June.</p> <p>BIO1352B :</p> <p>Prerequisite : A minimal experience in using a flora and some basic knowledge of ecology.</p> <p>Evaluation : Each group has to hand in the herbarium collection and the insects collected, with a written report that describes the flora, fauna and soil seed bank. They will present their results orally in front of the other students.</p> <p>Course materials : identification guides, bird song recordings on iCampus.</p> |
| <p>Cycle and year of study :</p> | <p>> Bachelor in Biology</p> |
| <p>Faculty or entity in charge:</p> | <p>BIOL</p> |