UCLouvain

lbio1216

2022

Marine biology field

2.00 credits	4.0 h + 36.0 h	Q2

Teacher(s)	Mallefet Jérôme ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	The students take part in a training course organized between April and September, at the research station in marine Biology of Wimereux (France). The aim is to carry out observations and experiments on living material. This represents a complement to the theoretical courses of invertebrates biology, and a concrete introduction to more advanced courses. The choice of the dates depends on the "calendar of the tides". Indeed, the field work is organized mainly around the excursions in the zone of the tides, other excursions and laboratory works are organized between those. For the tides, it is a question of going on the beach to the lowests spring tide, systematically to examine the settlement according to various factors (level, nature of the substrate, symbiosis, etc.); to take samples which are brought back to the laboratory, where they are examined more in details (exercises of systematic determination, study anatomical or physiological, etc), and possibly are fixed or collected for a later study. Summary of the activities The field course constitutes a first practical approach of the marine environment. The theoretical concepts contained in the notes of course allows students to prepare this training course. The field course is based on the practice and the personal observation. Access to a specific litterature and the compilation of theoretical information will supplement these field observations ; the joint uses of binocular, microscopes and dichotomic keys of determination will make it possible to carry out the report of training course.
Learning outcomes	**At the end of this learning unit, the student is able to :** 1 Following the participation in the course entitled Laboratoire of marine biology, the students will have acquired several concepts and competences: 1) organization and planning of field trips according to the weather parameters; 2) application of the methods of observations and systematic harvests; 3) specific determination of collected organisms using fauna and flora dichotomic keys; 4) acquisition of the concepts of zonation and physiological adaptations to the intertidal zone; 5) evaluation of the concepts of biological diversity according to the various biotopes; 6) drafting of review and a preparation for oral presentation.
Evaluation methods	Following participation in this activity students will have acquired several concepts and skills: 1) organization and planning of field trips based on meteorological parameters; 2) application of systematic observation and harvesting methods; 3) specific determination of organisms harvested through fauna and flora (use of dichotomous keys); 4) acquisition of the notions of zonation and physiological adaptations at the level of the littoral zone; 5) evaluation of the notions of biological diversity according to the different biotopes; 6) writing a summary report and preparing an oral presentation.
Teaching methods	An introductory course syllabus will be provided before this one, and preparatory audience courses will be provided. The field trips will be a big part of the work followed by practical lab work. The coaching staff accompanies groups of students to the field and directs the observations. Students will also work in groups to illustrate either biotopes or specific taxa.
Content	Students participate in an internship organized during the spring break period, in a Marine Biology laboratory in France (Wimereux or Roscoff). The goal is to make contact with Biology in the field, and to make observations on living or fresh material. This is a necessary complement to theoretical and practical courses in biology, and a concrete introduction to more advanced courses. Whether marine biology is justified by the fact that we find at sea representatives of all branches of the living world, in very varied environments on a small area. The choice of dates depends on the "tide calendar". Indeed, field work is organized mainly around observations in the foreshore area (the "tides"). For the tides, it is a question of going on different beaches with the low tides of high water, to systematically examine the stand according to various factors (level, nature of the substrate, symbiosis, etc.) to take samples which are brought back to the laboratory, where they are examined in more detail (systematic determination exercises, anatomical or physiological study, ethological observations).
Faculty or entity in charge	BIOL

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Additionnal module in Biology	APPBIOL	2		🔍