


In view of the health context linked to the spread of the coronavirus, the methods of organisation and evaluation of the learning units could be adapted in different situations; these possible new methods have been - or will be - communicated by the teachers to the students.

3 credits

30.0 h

Q2

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| Teacher(s) | Baret Philippe (coordinator) ;Defourny Pierre ;Delmelle Pierre ; |
| Language : | French |
| Place of the course | Louvain-la-Neuve |
| Main themes | The course proceeds from actual stakes related to the biological, agronomical and environmental engineering and will approach the following themes: - the bio-geochemical cycles of the biosphere (water, carbon, nitrogen); energetic flows. - notions of bio-climatology, classification of climates, climatic indicators. - basic notions of ecosystems (biotopes and biocenoses, trophic chains); food chains; production and productivity. - sustainable development; notions of equilibrium and imbalance; notions of vulnerability; biodiversity and the conservation problematic; pollution and traceability problems. - role of the soil as a reactor in the functioning of ecosystems: water and mineral elements storage, alteration and acidification; notions of resilience, mobility of biogenic elements and bio-pedological cycles; storage and mobility of contaminants. - impact of the human being on the functioning of the ecosystems and on the soil. |
| Aims | <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> |
| Content | The basic principles will be taught by means of concrete examples related to the biosphere engineering. For example: starting from the human nutrition seen globally, different concepts will be taught: trophic and food chains, energetic flows, productivity, bio-geochemical cycles (water, carbon, nitrogen), functions of the soil compartment such as storage, mineral supply... The learning process will be based on a problem-approach, where the basic concepts are acquired through an analysis of the stakes and a perspective view of the concepts. |
| Bibliography | Le cours ne fait appel à aucun support particulier qui serait payant et jugé obligatoire. Les ouvrages payants qui seraient éventuellement recommandés le sont à titre facultatif. |
| Faculty or entity in charge | AGRO |

| Programmes containing this learning unit (UE) | | | | |
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| Program title | Acronym | Credits | Prerequisite | Aims |
| Minor in Development and Environment | LDENV100I | 3 | |  |