

## LCHM1311

2016-2017

## Environmental chemistry

| 3.0 credits  | 30.0 h | 2a |
|--------------|--------|----|
| 0.0 0.0 0.10 | 00.0   |    |

| Teacher(s):                  | Vlad Alexandru ;  |
|------------------------------|---|
| Language :                   | Anglais   |
| Place of the course          | Louvain-la-Neuve  |
| Prerequisites :              | The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.   |
| Main themes :                | The course will deal with the environmental aspects linked to the air, water and soil pollution, whether of inorganic or organic nature. It aims at describing the main sources of pollution in our environment emphasizing the physico-chemical understanding (structure, stability, reactivity) and presenting the alternative strategies allowing to avoid or diminish the effects. The course will cover namely the following points:  - concerning air: greenhouse effect gases, ozone depletion, nitrogen oxides, organic volatile components, aerosols;  - concerning water and soil: drinking water, nitrates, chlorine and organochlorine compounds, heavy metals.   |
| Aims:                        | The objective of the course is to give future professionals in chemistry a global view of the environmental impact of chemistry, meaning its products and processes. The purpose is not to be exhaustive on the subject but to strengthen the awareness of the chemical origin of certain environmental problems, in the context of a rigorous scientific reasoning, based on concepts from the general, inorganic and organic chemistry courses, given in first and second year. The course will also introduce to the main juridical aspects involved in environmental protection in its different components: air, water, soil, waste handling.  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". |
| Faculty or entity in charge: | СНІМ  |

| Programmes / formations proposant cette unité d'enseignement (UE) |         |         |                              |                        |  |  |
|---|---------|---------|------------------------------|------------------------|--|--|
| Intitulé du programme   | Sigle   | Credits | Prerequis                    | Acquis d'apprentissage |  |  |
| Bachelor in Chemistry   | CHIM1BA | 3       | LCHM1111 <b>and</b> LCHM1211 | ٩                      |  |  |