UCLouvain

lepl1302

2020

Due to the COVID-19 crisis, the information below is subject to change, in particular that concerning the teaching mode (presential, distance or in a comodal or hybrid format).

5 credits	30.0 h + 30.0 h	Q1

Teacher(s)	Jeanmart Hervé ;Proost Joris ;SOMEBODY ;
Language :	French
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.*
Aims	*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".*
Evaluation methods	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** Students are evaluated individually with a written exam. The questions of the written exam are formulated in such a way as to verify the disciplinary learning outcomes listed above. This written exam focuses on answering questions related to the understanding of the theory as well as the ability to solve exercises of the same type as those proposed during the course activities. A written examination may also be organized to test the disciplinary learning outcomes achieved by the middle of the quadrimester. The mark of this test counts for one third of the final mark, provided that the result is higher than the mark of the exam alone. Finally, other forms of certificative activities can be implemented during the semester. The laboratory mentioned below is one example of them. The exam is composed of three parts: - open questions in chemistry (batteries, equilibria, kinetics, etc.) - open questions in thermodynamics (thermal cycles, etc.) - an multiple choice questionnaire on the whole contents of the course The final score is a weighted average of the scores obtained in the different parts except in two cases. - Deep failure in one of the parts that results in a failure of the exam. Principle of absorbent failure. - If the average out of 20 is between 9.01 and 9.99, the mark is deliberate and rounded to 9 or 10 depending on the scores obtained in the various parts. Active participation in mandatory laboratories is also assessed and included in the grade of the chemistry part. **Unjustified absence from the laboratory(ies) will result in a mark for absence from the examination.** If circumstances dictate it, the practical organization of the exam can be reviewed, via an online exam and the constraints it imposes. In this case, in case of doubt about the grade to be given to a student, a complementary oral exam could be organized.
Teaching methods	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** The course consists of 12 lectures, 9 tutorials (APE), and one or two laboratories. In 2020-2021, the organisation yes or no of these laboratories will depend on the evolution of the COVID-19 crisis.
Content	- perfect gases and kinetic theory of gases - complements on the first principle of thermodynamics and application to thermal cycles - first principle for open systems - second principle of thermodynamics applied to thermal cycles - solution and precipitation - thermodynamics of equilibrium - chemical equilibrium - redox - electrochemistry - chemical kinetics
Inline resources	https://moodleucl.uclouvain.be/course/view.php?id=8134
Other infos	Participation in the laboratories is mandatory. These are organized only once during the year. It is impossible to repeat them in the second session.

Faculty or entity in charge	BTCI

Force majeure

Evaluation methods	Written exam, potentially containing multiple choice questions, and open questions on theory and exercises. The exam grade will not contain a lab grade.

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Bachelor in Engineering	FSA1BA	5	LEPL1301	🔍