UCL Université catholique de Louvain

LPHY2330

2014-2015

Séminaire de didactique de la physique

5.0 credits	0 h + 30.0 h

Teacher(s) :	Plumat Jim ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	This teaching highlights the special features of learning physics through a critical study of subjects coming from various secondary school programmes. It will deal with problems related to the teaching of some basic concepts in physics (acceleration, force, field, energy, electric potential,') and the didactical approach to adopt. The activities that will be proposed to the students will be selected in accordance with a reflexive approach which we hope will develop and settle among the future teachers. The purpose is to put in place, through team work, a reflexive process leading the student to propose and justify the organisation of teaching sequences about precise subjects and linked to physics. These sequences will be afterwards presented and analysed by all the students of the group. The aim is to highlight the quality criteria of a teaching sequence in physics in order to make the students enumerate them by themselves, these criteria mainly referring to the scientific content and the teaching strategy elaborated. The rating will be done both on the devotion of the student in the preparation and their involvement during the seminar and on the writing of a personal file describing the analysis of a teaching sequence.
Aims :	This teaching is mainly aimed to students in 'high-level examination for recruitment of teachers' in science who didn't choose physics as basic training. This seminar is intended to explain and/or renew some fundamental concepts in physics so that the students would be asked to start the necessary work to prepare a lesson for secondary school pupils. This seminar was designed to broaden future teachers'scientific knowledge whose basic formation isn't physics and who could nevertheless be asked to teach it. *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 :	The rating will be done both on the devotion of the student in the preparation and their involvement during the seminar and on the writing of a personal file describing the analysis of a teaching sequence.
Other infos :	The registration to this course is left to the choice of the students who follow the aggregation in science and whose main training isn't physics.
Cycle and year of study :	> Master [120] in Chemistry > Master [120] in Biochemistry and Molecular and Cell Biology > Master [120] in Biology of Organisms and Ecology
Faculty or entity in charge:	CAFC