UCLouvain

## Ichm2310

2023

## Teaching internships in chemistry (including the internship integration seminar)

7.00 credits 15.0 ii + 40.0 ii Q i and Q2	7.00 credits	15.0 h + 40.0 h	Q1 and Q2
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Teacher(s)	de Wergifosse Marc ;					
Language :	French					
Place of the course	Louvain-la-Neuve					
Prerequisites	Didactics and Epistemology of Science Course: LSCI2320  In order to begin the secondary school internships, the student must have passed each of the D2 tests organized in October and November as part of the LBIO2340C, LCHM2340C and LPHYS2471C courses that are part of hish her PAE: the test in Chemistry (D2 subject) must have been passed with a minimum of 14/20; the tests in Biology and/or Physics (D2 subjects) must have been passed with a minimum of 12/20.  In order to complete the entire secondary school internship, the student must have passed the D3 test in Chemistry organised in February as part of the course LCHM2340D (D3 subjects) with a minimum of 14/20.					
Main themes	The seminar LCHIM2310 ( 15h = 8 x 2h) is a <b>compulsory</b> seminar for students registered for the agrégation in chemistry.  The topics covered are:  • The vademecum which specifies the expectations of the training courses and the instructions for the realization of a portfolio  • The management of a course sequence from a pedagogical and didactic point of view  • The specificities of teaching and learning methods  • The specificities of course preparations: didactic preparations, student documents, table sheets,  • The elaboration of different types of evaluations (criteria, indicators,)  • Exchanges of experiences during training courses: sharing of difficulties and strong points and reflection.  These seminars aim to prepare students for their teaching internship. In addition to 10 hours of observation, the internship consists of 30 hours of active practice, divided equally between two educational institutions, in upper secondary classes.  Each of these two internships will be supervised by a UCL-approved internship supervisor.  During their first internship, students will be required to teach mainly 2nd grade (4th year) biology, chemistry and physics.  During their second internship, students will be required to teach 3rd degree courses, mainly in chemistry.  In addition to the two interships in secondary schools, students have to do 5 hours of tutoring and 5 hours of animation related to science promotion.					
Learning outcomes	At the end of this learning unit, the student is able to:  Contribution of the teaching unit to the AA reference framework of the program  With regard to the competency framework of the chemistry degree program (of the didactic aim), this teaching unit contributes to the development and acquisition of the following competencies: AA1.2 / AA1.3 / AA2.4 / AA2.3 / AA2.4 / AA2.5 / AA2.7 / AA2.8 / AA3.1 / AA3.2 / AA3.3 / AA3.4  Learning outcomes at the end of the teaching unit  At the end of this teaching unit, the student is able to:  - Use disciplinary didactics and epistemology to guide pedagogical action,  - Transpose scholarly knowledge into school knowledge,  - Design and plan teaching-learning situations according to the students concerned and in line with the skills referential and the programs,  - Demonstrate mastery of new disciplinary and interdisciplinary knowledge when teaching,  - To explore new approaches and pedagogical tools in subject matter, interdisciplinary and technological areas during their internships,  - Design, conduct and evaluate experimental sequences (classroom and/or laboratory experiments),  - Identify the initial spontaneous representations and conceptions of the students in order to take them into account and make them evolve during a teaching sequence,  - To bring the students to take a critical look at the construction of science (via, for example, the construction of models),  - To master and mobilize the communication and relational skills that are essential to the teaching profession,					

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	<ul> <li>Mobilize knowledge of the humanities for an accurate interpretation of situations in and around the classroom and for a better adaptation to school audiences,</li> </ul>				
	- To dialogue and collaborate in a constructive and benevolent manner with the educational partners involved in training activities (in seminars and internships: directors, supervisors, internship supervisors and other interns),				
	<ul> <li>Integrate pedagogical attitudes and behaviors in the service of individual and collective learning, and in the management of the class group,</li> </ul>				
	<ul> <li>Adopt a reflective attitude on one's teaching practices and one's teaching posture based on didactic and pedagogical principles as well as on educational research.</li> </ul>				
Evaluation methods	Students enrolled in this seminar will be assessed as follows				
	Activity 1: a personal portfolio including a reflective work will be made on the basis of the contributions of the classroom sessions and the experiences of the internship (20% of the final mark);				
	Activity 2: a grade for the internships will be established in consultation with the internship supervisors, the holder and the teaching staff (80% of the final grade).				
	Each of the 2 activities must be passed with a mark equal to or higher than 10/20 for this UE to be passed. The absorbent mark principle is applied to this UE.				
	Attendance at the seminar is required. In accordance with article 72 of the General Regulations for Studies and Examinations, the Chairpersons may propose to the Jury that it oppose the registration of a student who has not attended 80% of the seminars during the June or September session.				
Teaching methods	Teaching activities will be provided by the course instructor, primarily in co-construction with students.				
Content	The aim of this teaching unit is to equip students to become future science and chemistry teachers, by enabling them to put into practice all the theoretical elements covered in the didactic and seminar courses during their internships.				
	The internships are of different types:  - Two internships (each consisting of 5 hours of observation and 15 hours of teaching) are organized in two different upper secondary schools, mainly in chemistry, but also in biology and physics; the UCLouvain-approved internship supervisors are chosen by the internship coordinators;				
	- A 5-hour work placement as a tutor for students with difficulties in chemistry;				
	- A 5-hour extracurricular activity (as part of Printemps des sciences or another type of event).				
Inline resources	on Moodle UCLouvain, acronym LCHM2310.				
	The site contains the documents presented and used during the seminars and allows the deposit of the students' productions.				
Bibliography	Des ouvrages et publication scientifiques en relation avec les disciplines enseignées et avec la pratique seron présentés lors des cours.				
	Books and scientific publications related to the disciplines taught and to the practice will be presented during the courses.				
Other infos	Prerequisite: In order to begin the secondary school internships, the student must have passed each of the D2 tests organized in October and November as part of the LBIO2340C, LCHM2340C and LPHYS2471C courses that are part of his or her EAP: The test in chemistry (D2 subject) must have been passed with a minimum of 14/20; the tests in biology and/or physics (D2 subjects) must have been passed with a minimum of 12/20.				
	In order to complete the entire secondary school internship, the student must have passed the D3 test in Chemistry organised in February as part of the course LCHM2340D (D3 subject) with a minimum of 14/20.				
Faculty or entity in	CAFC				
charge					

Programmes containing this learning unit (UE)							
Program title	Acronym	Credits	Prerequisite	Learning outcomes			
Master [120] in Chemistry	CHIM2M	7		٩			
Teacher Training Certificate (upper secondary education) - Chemistry	CHIM2A	7		٩			