




2.00 credits

18.5 h

Q1


**This learning unit is not open to incoming exchange students!**

Teacher(s)	Dias de Carvalho Junior Gabriel ;Plumat Jim ;
Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	<ul style="list-style-type: none"> <li>• The course LSCI2320 taught in Q1 (S1 to S4) must have been taken.</li> <li>• The knowledge of the discipline(s) to be taught, i.e., the knowledge of physics related to the 2nd grades of secondary education in general science.</li> <li>• Clear and correct communication in the language of instruction both orally and in writing.</li> <li>• The interpersonal skills and professional postures normally expected of a teacher.</li> </ul>
Main themes	<ol style="list-style-type: none"> <li>1. The didactic specificities of a teaching sequence in physics at the 2nd level (D2)</li> <li>2. Experimentation, the scientific approach and the investigative approach in D2</li> <li>3. Problematization and modeling in D2</li> <li>4. The importance of epistemology; the major epistemological currents</li> <li>5. Evaluation</li> <li>6. Difficult concepts to teach in physics at D2</li> </ol>
Learning outcomes	
Evaluation methods	Students enrolled in the Biology, Chemistry, and Physics (LPHYS2471 C and LPHYS2471 D) aggregation are assessed as follows: ... Students enrolled only in the LPHYS2471 C module are assessed as follows: ...
Teaching methods	The teaching activities are those recommended in secondary education: group work, lectures, flipped classes, MOOC... mainly in co-construction with the students.
Content	This teaching unit consists in "equipping" students to become future physics teachers at D2 and D3. The aim is not only to present the elements of didactics related to the teaching of physics but also to ensure the transfer and appropriation of these tools by the future teachers.
Inline resources	on MoodleUCL, acronym LPHYS2471. The site contains the documents presented and used during the courses and allows the deposit of the students' productions.
Bibliography	Des ouvrages en relation avec les disciplines enseignées et avec la didactique seront présentés lors des cours. Books related to the subjects taught and to the teaching practice will be presented during the lectures.
Other infos	LPHYS2471 C and D is a required didactic course for students enrolled in the physics program and an elective for students enrolled in the biology program. It can only be taken if LSCI2320 has been previously taken. LPHYS2471 C is an elective course for students registered for the agrégation in Geography or Mathematics. It can only be taken if LSCI2320 has been taken previously. LPHYS2471 C is taken in Q1 during S8 to 14 for 2 hours per week (15 hours equivalent to 2 credits) LPHYS2471 D is given in Q2 for 2 hours per week (22.5 hours equivalent to 2 credits)
Faculty or entity in charge	CAFC

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Teacher Training Certificate (upper secondary education) - Mathematics	MATH2A	2		
Teacher Training Certificate (upper secondary education) - Geography	GEO2A	2		
Master [120] in Mathematics	MATH2M	2		
Master [120] in Geography : General	GEOG2M	2		