



7.00 credits

54.0 h + 36.0 h

Q2

Teacher(s)	Lemaitre Vincent ;
Language :	French
Place of the course	Louvain-la-Neuve
Learning outcomes	
Evaluation methods	<p>The exam is written. It includes various problems similar to those solved in the guided exercise sessions and some questions which aim to check that the concepts and developments presented during the theoretical course have well been mastered (comprehension questions, demonstrations, ...).</p> <p>All the subjects addressed during the theoretical lessons and the guided exercise sessions must be known for the exam. However, for part A, the students have access to a form with the main formulas, which is posted on the LPHY1102 MoodleUCL site.</p> <p>It is essential to bring a simple scientific calculator to the exam.</p> <p>For students enrolled in the whole teaching unit, the exam takes place for the entire final mark. However, if the average mark out of 20 obtained in the tests relating to practical laboratory work is between 10 and 14 (greater than 14), then an average mark of 9/20 (8.5 / 20) obtained in the exam on both parts will be transformed into 10/20. In addition, a question related to the subjects seen in laboratory sessions will be asked during the exam.</p> <p>The modalities mentioned above are valid whatever the exam session.</p>
Teaching methods	<p>The teaching activities include (1) the theoretical course, (2) guided exercise sessions, (3) a practical laboratory work and (4) the tutorial. It is essential to have a simple scientific calculator for the guided exercise sessions and the practical laboratory work.</p> <p>The different subjects are presented in the theoretical course via slides and blackboard notes. The fundamental concepts are illustrated using applications from modern life, short films or animations, and experiments. The guided exercise sessions play an essential role in the comprehension of the theoretical course and allow the application of the studied theoretical concepts to real problems.</p> <p>Participation in practical laboratory work sessions is not compulsory but is strongly recommended. A test will also be proposed before each laboratory session and this test may have an impact on the success of the course (see the section on the method of evaluation). A laboratory report can be drawn up and submitted at the end of the session. This will be corrected by the assistant for pedagogical purposes but the mark obtained will not have any influence on the final mark of the exam.</p> <p>Tutorials, during which students can ask questions to the teaching team, is organized every week. The golden rule is of course continuous work. In particular, it is essential that the student regularly solves exercises on his own, without just reading their solutions.</p>
Content	<p>Volume1 of Benson (5th edition):</p> <p>14.1 Density</p> <p>14.2 Modulus of elasticity</p> <p>Volume 2 of the Benson (5th edition):</p> <p>Chapters 1 to 13</p> <p>Volume 3 of the Benson (5th edition):</p> <p>Chapters 1 to 7</p>
Inline resources	Copy of the trasparents presented during the course
Bibliography	<ul style="list-style-type: none"> • Volume 2 et 3 du Benson <p>Les livres de physique "Benson" (si possible la 5ème edition) Edition de boeck</p> <p>Une dizaine de pages du volume 1 pour la partie solides/élasticité</p> <p>Le volume 2 "Electricité & Magnétisme" pour la partie électromagnétisme (incluant E et B dans la matière)</p> <p>Le Volume 3 "Ondes, optique et physique moderne " pour les parties oscillations, ondes mécaniques, ondes électromagnétiques et optique géométrique.</p>
Other infos	Following the sanitary conditions, the modalities of the teaching AND the examination could be reassessed according to the situation and the rules in force.

Faculty or entity in charge	SC
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Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Bachelor in Chemistry	CHIM1BA	7		
Minor in Scientific Culture	MINCULTS	7		
Bachelor in Geography : General	GEOG1BA	7		