



5 credits

30.0 h + 30.0 h

Q2

Teacher(s)	Bertrand Bruno ;
Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	<i>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.</i>
Aims	<i>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".</i>
Content	<p><b>Part 1: Mechanical waves</b></p> <ol style="list-style-type: none"> <li>1. Aspects of mechanical waves</li> <li>2. The particular case of sound waves</li> </ol> <p><b>Part 2: Geometrical optics and physical optics</b></p> <ol style="list-style-type: none"> <li>1. Geometrical optics, reflection and refraction</li> <li>2. Geometrical optics, Lenses and optical instruments</li> <li>3. Electromagnetic waves</li> <li>4. Physical optics, polarization and 1D interferometry</li> <li>5. Physical optics, Diffraction and interference grating</li> </ol> <p><b>Part 3: Modern Physics</b></p> <ol style="list-style-type: none"> <li>1. Introduction to special relativity</li> <li>2. Introduction to quantum physics</li> <li>3. Nuclear physics, notions of radioactivity</li> </ol>
Bibliography	Physique - Volume 3 : Ondes, optique et physique moderne, Harris Benson, Editions de Boeck
Faculty or entity in charge	AGRO

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Aims
Bachelor in Geography : General	<a href="#">GEOG1BA</a>	5	<a href="#">LPHY1101</a> AND <a href="#">LPHY1102</a>	
Bachelor in Bioengineering	<a href="#">BIR1BA</a>	5	<a href="#">LBIR1110</a> AND <a href="#">LBIR1121</a> AND <a href="#">LBIR1122</a>	
Additional module in Chemistry	<a href="#">LCHIM100P</a>	5		