



Course Title :	Experimental Project
Number of hours/semester :	During September, 1 st Semester
Number of ECTS :	6
Lecture outline, contents :	<p>Students perform laboratory work over a month period of time during the first semester. They work in teams of 2. They have to carry out a simple experiment, from the conception to the examination of the results, being also responsible for the preparation of the experimental setup.</p> <p>Different subjects are proposed : a) gamma spectroscopy applied to nuclear structure, to interaction of gamma radiation with matter properties or to determine the geographical origin of unknown samples; b) study of neutron-gamma discrimination techniques; c) measurement of muon lifetime or the use of muons for tomography; d) spectrometry applied to solar light; e) cosmic ray studies and f) positronium decay properties.</p> <p>The results are presented in the form of a 4-pages article. This allows them to acquire knowledge in instrumentation, data analysis and detection techniques, and writing a short article.</p>
Pedagogical methods :	Lab Work
Prerequisites :	néan
Modalities of knowledge assessment :	Continuous evaluation during the Experimental Project period, evaluation on the written article and an oral examination.
Bibliography :	néan