

SC

PHYS2321 Physics Education

[22.5h] 2 credits

Teacher(s): Jacques Lega, Jim Plumat

Language: french

Level: 2nd cycle course

Aims

This course, which is complementary to the general teaching methods course, aims to develop future teachers' ability to design and implement physics teaching modules that will be meaningful to pupils.

Main themes

The first part of the course, which focuses on methodological aspects of teaching and learning, is devoted to an in-depth consideration of the goals of physics teaching, the preparation and implementation of a lesson, teaching tools, and the evaluation of what has been achieved. The second part involves analysis of the contents of physics syllabi, with the emphasis on fundamental ideas, historical aspects, and the pupils' own spontaneous notions. The third part is devoted to the design, development, and implementation of experiments, in a concrete situation in the physics teaching laboratory. The part of the course devoted to the methodology of teaching and learning is for the most part interactive and takes as its starting point the perceptions and personal experiences of the students. The classes dealing with the content of syllabi benefit from the contributions made by various Physics Department teachers. The laboratory activities, finally, are designed with a view to increasing students' familiarity with the experimental approach and encouraging them to consider the numerous questions that will necessarily arise in relation to teaching methods.