

Faculty of Medicine



MD1002

Experimental physics and mathematical introduction to experimental sciences
(2nd part)

[30h+21h exercises] 5 credits

Teacher(s): Bernard Piraux
Language: French
Level: First cycle

Aims

Physics is considered as an experimental science based on the precise observation of reality and the collection of data whose interpretation is based on assumptions to be confirmed experimentally. The objective of this course is twofold. On the one hand, to instil into the students a good scientific approach and reasoning and on the other hand, to give to the students the elements necessary for a good understanding of the scientific matters the student will be confronted with later on. The course refers to many applications in medicine and biology

Main themes

The course gives elements of electricity, magnetism and optics.

Content and teaching methods

Electricity

- electrostatic
- electric currents
- magnetism
- electromagnetic induction
- alternative currents

Optics

- law of reflection
- law of refraction
- optical instruments

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Prerequisite : Notions of calculus (the students are assumed to know about derivation and integration).

Evaluation : written exam.

Support : syllabus, slides, software, Icampus, tutorials (labs and problems to group of 20 students).

Other credits in programs

DENT11BA	Première année de bachelier en sciences dentaires	(5 credits)	Mandatory
-----------------	---	-------------	-----------