

UE Experimental physics - PHY438 -



Niveau d'étude
Bac ou
équivalent



ECTS
3 crédits



Crédits ECTS
Echange
3.0



Composante
Département
de la licence
sciences et
technologies
(DLST)



Volume horaire
32h



Période de
l'année
Printemps (janv.
à avril/mai)

Diplômes intégrant cet élément

- Licence Physique

- **Langue(s) d'enseignement:** Français, Anglais
- **Ouvert aux étudiants en échange:** Oui
- **Crédits ECTS Echange:** 3.0
- **Code d'export Apogée:** PAX4PH98

Présentation

Description

Practical courses.

The 8 lab sessions have been chosen to cover a wide range of experimental topics, instrumentation and methodological approaches. Recap sheets will be requested at each session for a regular follow-up of the learning progress.

Objectifs

Educational objectives of the module:

- Acquire experimental skills in different domains of physics, related to other L2 courses: energetics, electromagnetism, acoustic waves, wave optics
- Discover or illustrate physical phenomena by experiment.

Heures d'enseignement

TP	TP	32h
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Pré-requis recommandés

These lab sessions address different domains of physics (calorimetry, electrokinetics, induction, point mechanics, geometrical optics) for which the (theoretical) background is supposed to be known.

Having already used measuring devices (oscilloscope, multimeter, etc.) and having some basic knowledge on how to treat experimental data (in particular about uncertainties) is also considered as a prerequisite.

Software: data graphing and analysis

Période : Semestre 4

Informations complémentaires

conditions for the admittance of exchange students (ERASMUS, etc.) to phy408/438

- contact the organizing teacher **prior to the first lab session**, typically before Jan 15, to clarify whether you will be able to join or not (<https://chamilo.univ-grenoble-alpes.fr/courses/PHY408/index.php> , sylvie.zanier@univ-grenoble-alpes.fr , gabriel.seyfarth@univ-grenoble-alpes.fr)

- admittance depends on the number of available places in the lab rooms (total number is limited for security reasons)

- firm agreement to be present at **all** 8 lab sessions along the semester, starting from the first one, and also at the 2 hands-on exam sessions

Bibliographie

https://chamilo.univ-grenoble-alpes.fr/courses/PHY408/index.php?id_session=0

Infos pratiques



Contacts

Responsable pédagogique

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Campus

› Grenoble - Domaine universitaire