

26905 - Fundamentals of Physics II

Información del Plan Docente

Academic Year	2018/19
Subject	26905 - Fundamentals of Physics II
Faculty / School	100 - Facultad de Ciencias
Degree	447 - Degree in Physics
ECTS	6.0
Year	1
Semester	Second semester
Subject Type	Basic Education

Module

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives. A wide range of teaching and learning tasks are implemented, such as lectures, practice sessions, autonomous work, study and assessment tasks.

Students are expected to participate actively in class throughout the semester.

Further information regarding the course will be provided on the first day of class.

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4.2. Learning tasks

The program is organized by topic. Each of the themes is structured as follows:

- Lectures: Each block consists of several lectures, in which the main topics are presented.
- Applications: The Physics of each theme are applied to several cases.
- Practice sessions: Problems related to the theme topics are solved.

4.3. Syllabus

The course will address the following topics:

- Topic 1. Waves
- Topic 2. Gravitational fields
- Topic 3. Electric fields
- Topic 4. Conductors and dielectrics
- Topic 5. DC currents
- Topic 6. Magnetism fields
- Topic 7. Magnetism induction
- Topic 8. Electromagnetic waves
- Topic 9. Optics

4.4. Course planning and calendar

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course, will be provided on the first day of class or please refer to the Facultad de Ciencias web <https://ciencias.unizar.es/grado-en-fisica-0>.

Organization of the sessions: Each block has different time duration. Here is presented an approximate length of each item:

- Topic 1 (10 horas)
- Topic 2 (6 horas)
- Topic 3 (7 horas)
- Topic 4 (9 horas)
- Topic 5 (5 horas)
- Topic 6 (8 horas)
- Topic 7 (6 horas)
- Topic 8 (3 horas)
- Topic 9 (6 horas)
- The exam will be taken in the dates decided by the Science Faculty.

4.5. Bibliography and recommended resources