Universidad Zaragoza

Year : 2019/20

26905 - Fundamentals of Physics II

Syllabus Information

Academic Year: 2019/20
Subject: 26905 - Fundamentals of Physics II
Faculty / School: 100 -

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.

4.2.Learning tasks

The course is organized by topics. Each of the topics is structured as follows:

- Lectures: Each topic consists of several lectures, in which the main concepts are presented.
- Applications: The Physics of each topic is applied to several cases.
- Practice sessions: Problems related to the topic 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. Magnetics fields
- Topic 7. Magnetics 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 topic 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