

26942 - Microwaves: Propagation and Aerials

Información del Plan Docente

Academic Year	2016/17
Academic center	100 - Facultad de Ciencias
Degree	447 - Degree in Physics
ECTS	5.0
Course	
Period	First semester
Subject Type	Optional
Module	---

1. Basic info

1.1. Recommendations to take this course

1.2. Activities and key dates for the course

2. Initiation

2.1. Learning outcomes that define the subject

2.2. Introduction

3. Context and competences

3.1. Goals

3.2. Context and meaning of the subject in the degree

3.3. Competences

3.4. Importance of learning outcomes

4. Evaluation

5. Activities and resources

5.1. General methodological presentation

5.2. Learning activities

Lectures: Development and ongoing discussion of the program contents of the course in classroom teaching, based on the literature provided by the teacher.

Classes of problems: Solving practical cases in the classroom, with active student participation.

Laboratory sessions: Explanation in the classroom of the equipment and measurement methods. Experimental realization of laboratory practices in 4 sessions with the support of a supplementary explanatory script. Preparation by students in hours of study of a brief report that eventually may have to defend.

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Theoretical and practical works that students must explain in the classroom.

Tutorias.

5.3.Program

- 1 Circuits of distributed parameters.
- 2 Transmission systems.
- 3 Resonant cavities.
- 4 Antennas and characterization.
- 5 Antenna arrays
- 6 Electromagnetic compatibility

5.4.Planning and scheduling

Schedule sessions and presentation of works.

Distribution, depending on the credit of the various activities scheduled as follows:

Theoretical and practical classes: lectures and case-based learning classes (3.5 ECTS), and problem solving in small group (0.5 ECTS). The days, hours and classroom will be assigned by the Faculty of Science.

Laboratory Practice: 1 ECTS. The dates will be set at the beginning of the semester according to the number of enrolled students and availability of laboratory and instrumentation.

Practical work: Workload: 20 hours, with a classroom presentation included.

Exams: The written exam will last for 4 hours. It will be held at the end of the term, on the date assigned by the Faculty of Science. For the practical laboratory exam, 1 hour, the call will be published in due time for students who must do it.

5.5.Bibliography and recommended resources