



Year : 2018/19

30339 - Radio-Communication Systems

Syllabus Information

Academic Year:	2018/19
Subject:	30339 - Radio-Communication Systems
Faculty / School:	110 -
Degree:	438 - Bachelor's Degree in Telecommunications Technology and Services Engineering
ECTS:	6.0
Year:	4
Semester:	First semester
Subject Type:	Compulsory
Module:	---

General information

Aims of the course

Context and importance of this course in the degree

Recommendations to take this course

Learning goals

Competences

Learning goals

Importance of learning goals

Assessment (1st and 2nd call)

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

Methodology, learning tasks, syllabus and resources

Methodological overview

1. Lectures (40 hours).
2. Problems (10 hours)
3. Laboratory (10 hours): 5 sessions of 2 hours each.
4. Group assignments.
5. Academic tutoring.

Learning tasks

Lectures: 40 hours presenting the contents of the course

Problems: 10 hours resolving problems and practice cases

Laboratory assignments: 5 sessions of 2 hours each

Group assignments: each group of students, under the supervision of a teacher, will be assigned a case study related to radio communication systems

Syllabus

The course program consists of five lessons:

1. **Terrestrial Fixed Radiolinks**
2. **Mobile Communications**
3. **Satellite Communications**
4. **Broadcasting systems**
5. **Radar systems.**

LAB activities.

During the course some supervised works will be carried out as well as some seminar.

Course planning and calendar

Calendar will be set by the EINA.

The schedule for lecture and laboratory sessions and the evaluation dates will be provided by the EINA before the beginning of the semester.

Bibliography and recommended resources

- HERNANDO RÁBANOS J. M., "Transmisión por radio" 6ª ed. Madrid : Editorial Universitaria Ramón Areces, 2008
- Hernando Rábanos J. M., "Comunicaciones móviles", Ed. Centro de Estudios Ramón Areces, 1997.
- CARDAMA A. y otros, "Antenas" Edicions UPC, Segunda Edición, Nov 2002.
- FREEMAN Roger L., "Radio System Design for Telecommunications", Wiley-Interscience, 2007.