

# 30337 - Telecommunications Services and Systems

## Syllabus Information

**Academic Year:** 2020/21

**Subject:** 30337 - Telecommunications Services and Systems

**Faculty / School:** 110 - Escuela de Ingeniería y Arquitectura

**Degree:** 438 - Bachelor's Degree in Telecommunications Technology and Services Engineering

**ECTS:** 6.0

**Year:** 3

**Semester:** Second semester

**Subject Type:** ---

**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:

1. Lectures (42 hours).
2. Problems (10 hours)
3. Laboratory (8 hours): 4 sessions of 2 hours each.
4. Group assignments.
5. Academic tutoring.

### 4.2.Learning tasks

The course includes the following learning tasks:

Lectures: 42 hours presenting the contents of the course

Problems: 10 hours resolving problems and practice cases

Laboratory assignments: 4 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 telecommunication systems

### **4.3.Syllabus**

The course will address the following topics:

- 1. International Telecommunication Organizations and Normative.**
- 2. Telecommunication Infrastructures.**
- 3. Positioning Systems**
- 4. Fixed Systems and Services**
- 5. Mobile Systems and Services**
- 6. Broadcasting Systems and Services**

### **4.4.Course planning and calendar**

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

### **4.5.Bibliography and recommended resources**

[http://biblos.unizar.es/br/br\\_citas.php?codigo=30337&year=2019](http://biblos.unizar.es/br/br_citas.php?codigo=30337&year=2019)