

Year: 2019/20

30211 - Computer Networks

Syllabus Information

Academic Year: 2019/20

Subject: 30211 - Computer Networks

Faculty / School: 110 - Escuela de Ingeniería y Arquitectura

326 - Escuela Universitaria Politécnica de Teruel

Degree: 330 - Complementos de formación Máster/Doctorado

443 - Bachelor's Degree in Informatics Engineering 439 - Bachelor's Degree in Informatics Engineering

ECTS: 6.0 **Year**: 2

Semester: First semester **Subject Type:** Compulsory

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 in the School of Engineering and Architecture Campus Rio Ebro such as:

classroom activities

Activity Type 1 (lectures) 30 hours

Activity Type 2 (class of problems) 15 hours

Activity Type 3 (practical classes) 15 hours

Off-site activities

Activity Type 6 (practical work) 12 hours

Activity type 7 74 hours (personal study)

Final evaluation Activity

Activity Type 8 (written test) 04 hours

In the Polytechnic School Campus Teruel:

classroom activities

Activity Type 1 (lectures) 30 hours

Activity Type 2 (class of problems) 16 hours

Activity Type 3 (practical classes) 14 hours

Off-site activities

Activity Type 6 (practical work) 08 hours

Activity type 7 79 hours (personal study)

Final evaluation Activity

Activity Type 8 (written test) 03 hours

4.2.Learning tasks

The course includes the following learning tasks:

Activity Type 1 (lectures): 30 hours

Teach the course syllabus

In the School of Engineering and Architecture Campus Rio Ebro:

Activity Type 2 (class of problems): 15 hours

Solve problems concerning the content of the lectures.

Activity Type 3 (practical classes): 15 hours

6 sessions of laboratory practice network.

Activities type 6 (practical work): 12 hours

The student will do practical work-based programming network applications.

In the Polytechnic School Campus Teruel:

Activity Type 2 (kinds of problems): 16 hours

Solve problems concerning the content of the lectures.

Activity Type 3 (practical classes): 14 hours

7 sessions of laboratory practice network.

Activities type 6 (practical work): 08 hours

The student will do practical work-based programming network applications.

4.3.Syllabus

The course will address the following topics:

- Introduce the idea of network architecture
- Basic physical principles that underpin
- Elements that provide point-to-point communication between two entities
- Networking and IP protocol
- Communication elements that provide end-to-end between two entities
- Orthogonal aspects such as congestion and quality of service
- Conceptual layers above the level of data transport

4.4. Course planning and calendar

In the School of Engineering and Architecture Campus Rio Ebro:

During the 15 weeks (3 hours/week):

- Development of lectures
- Development sorts of problems

During the 15 weeks (every other week, 2 hours / 2 weeks)

Development laboratory practice sessions

Also, in specific weeks:

Supervising practical work

In the Polytechnic School Campus Teruel:

The course is given for 15 weeks with the following distribution of activities:

During the 15 hours/week/week):

- Development of lectures
- Development sorts of problems

During the 15 weeks (every other week, 2 hours / 2 weeks)

• Development laboratory practice sessions. They must be submitted in writing the results of each practice. If delivered after the date set the highest score to get in practice will be: 7 points (three days later), 5 points (four to seven days later). After a week delivery will not be accepted.

4.5. Bibliography and recommended resources