



# Comunicações Móveis

1º Semestre, 2023/2024

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# Mobile Networks

- Professors

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	Segunda	Terça	Quarta	Quinta		Sexta	Sábado
9:00				CM 04.3.30 dcorujo@ua.pt Daniel Nunes Corujo TP1 (TP)	CM 04.3.31 fontes@ua.pt Francisco Manuel Marques Fontes TP3 (TP)		
9:30							
10:00							
10:30							
11:00							
11:30							
12:00							

# Planning

- 14 weeks scheduled for theoretical and practical classes
  - Information in elearning...
  - English language in slides

# Objectives

- Develop concepts associated to different types of mobile networks
  - Overall perspective of different wireless networks
  - Integration into a future vision, with heterogeneous environments.
    - “5G”-alike world.
  - Focus on networking, system and protocol aspects
    - IT-integration aspects mostly in other subject
  - Students should be able to:
    - understand new technologies and concepts of wireless communications;
    - be able to use their knowledge to react to the current changes in wireless networks
    - understand future mobile network integrated systems;

# Program

1. Mobile Communications: Multicast, Broadcast, Radio vs IP, Satellite
2. Wireless network models: IEEE802 architecture, Wi-Fi, Bluetooth
3. (Wide) Wireless Sensor networks: ZigBee, LoRa, SigFox
4. Mobile Networks and associated systems
5. Mobile Communications systems evolutions: the Future!

# Evaluation criteria

- Theory: 50%
  - Exam at the normal season
  - Final exam (a.k.a. exame de recurso) will contain all subjects as well
- Practical: 50%
  - 15%: Written mini-test about the practical works (23/11)
  - 35%: Project Work
    - The project is to be evaluated during classes' season (i.e., before the exams)

# Organization

- A mix of classes, all held in the laboratory
  - Theoretical exposition
  - Talks from companies on selected subjects
  - Practical works
  - Project work and demonstration
  - Mini-test (24/11)
- All information to be displayed in e-learning
  - Announcements
  - Classes handout
  - Practical works
  - Evaluation and grades
- Summaries in paco.