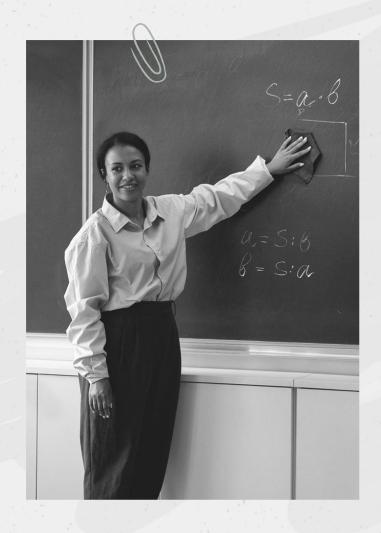# Servicios y Aplicaciones Distribuidas

MUIINF – ETSINF - UPV

Contact

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Tutorías bajo demanda

Course Objectives

- Understand main concepts of distributed systems

- Identify approaches to design distributed services

- Develop awareness of main challenges

- Develop practical skills with hands on labs
  E.g., Security, resource optimization, application development

Grading

Theory Exam

25%

Seminars/Lab Exam

25%

Lab Project

Seminar quizes

25%

Calendar & Classes

4.5 credit Theory/Seminars   1.5 credits Labs

Flexible hours in classroom (Tuesdays)

In-classroom

All Tuesdays

Last class: December 16

Mixed theory/Seminars

On-line

Fridays:

Last session: December 16

Mixed Seminars/Labs/Tests

Exams: December 19, during class (remote). Poliformat

Syllabus

Preliminary

Topics

01
Foundations

Architectures..., Coordination

02
Deployment

SLA, QoS, Cloud

03
Security

Approaches, Concepts

04
Technologies

NATS, Prometheus, STEP, APISIX, Docker

Design, Implement, Deploy

What

- Simple illustrative service
- Integrate some software pieces
  - Queues
  - Inverse proxy
  - Authenticator
- Development

How

- Groups of 3
- Typescript/ Golang
- Use git
  - Hand in complete repo in tgz format

Technologies

Typescript/Golang

Implementation

Git

Project development

Docker

Packaging for deployment

VSCode

Editing

QUIZ

Quienes

Informática

- Otros
- ...

Typescript

- Nivel

Git

- Requerido para Desarrollo y entrega

Trabajo

- Full time?

Golang

- Nivel

Linux

- Aconsejable para desarrollo