Course summary

SO 2022_2023_Q1
Outline

- Goals
- Competences
- Methodology
- Course scheduling
- Assessment
- Communication Channels

http://docencia.ac.upc.edu/FIB/grau/SO/index.html
Goals

- O.S. Functions (system calls): To know and to be able to use basic S.O. Functionality (for Linux based systems)
  - Creation of new “programs” (processes)
  - Associating an executable with a running program
  - Changing the amount of memory used by a “program”
  - Send/Receive data to/from devices
  - ...

- O.S. Main services: To know basic services offered by the O.S. (Linux based systems).
  - Main data structures
  - Main algorithms
Competences

■ Techniques
  • Look at the official web page to have the details 😊
  • Resume: To know how to use, evaluate and design an O.S. and applications running on top of them

■ Transversals
  • To have an appropriate attitude towards work: To be punctual, don’t disturb, to deliver homework in time, etc
Technical Competences (Level 2)

• CT6 - To demonstrate knowledge and comprehension about the internal operation of a computer and about the operation of communications between computers.
  • CT6.1 - To demonstrate knowledge and capacity to manage and maintain computer systems, services and applications.
  • CT6.3 - To demonstrate knowledge about the characteristics, functionalities and structure of the Operating Systems allowing an adequate use, management and design, as well as the implementation of applications based on its services.

• CT7 - To evaluate and select hardware and software production platforms for executing applications and computer services.
  • CT7.3 - To determine the factors that affect negatively the security and reliability of a hardware/software system, and minimize its effects.
Transversal Competences

- Appropriate attitude towards work (nivell 1)
- Attendance, Punctuality, Respect, Motivation, Quality and Responsability

What do you have to do?

- Lab Sessions
  - Be on time (15 min. margin)
  - Prepare sessions (previous homework)
    - Deliver before session starts (Racó)
  - Perform sessions (whole session=2 hours) and **UNDERSTAND THEM**
    - Deliver at the end of session (Racó) + Atenea Test at the beginning of next session
  - Provide a minimum quality in the work delivered in lab sessions

- Theory Lectures
  - Attend and appropriate behaviour

How is it assessed?

- Mainly on lab deliverables
Methodology (I)

- Theoretical sessions
  - 2h/week (50%)
  - Concepts and examples
  - We will use slides (ppoint) and blackboard
- 3 exercise sessions: see the course scheduling
Methodology (II)

- **Laboratory (Mandatory)**
  - 2h/week (50%)
  - **Work in groups of 2 students**
    - Previous work → delivered through the RACO
    - Work of the session → delivered through the RACO (the delivery is closed some minutes before the end of the class)
      - **It is mandatory to deliver 80% of sessions to be eligible to follow the continuous assessment (S0 session is not taken into account)**
    - Atenea online tests (individual) at the end of each session (except session 1 and session 2). Can not be solved remotely
  - Two mock exams (individual). Can not be solved remotely
Organization

- Theory lectures and lab sessions are 100% in-person

- Lab sessions in Theory classrooms
  - Every student has to bring its own laptop
  - FIB has laptops to be lent through previous booking
    
    | [https://www.fib.upc.edu/ca/la-fib/serveis-tic/prestec-de-portatils](https://www.fib.upc.edu/ca/la-fib/serveis-tic/prestec-de-portatils) |
  - After the first lab session we will assume that your laptop is configured to perform all lab sessions. If you have any issue to setup your laptop ask your laboratory teacher for help during the S1
    
    | [https://softdocencia.fib.upc.es/software/Ubuntu64-18LTSv1.zip](https://softdocencia.fib.upc.es/software/Ubuntu64-18LTSv1.zip) |
  - System requirements: Linux OS
    - Native
    - Or using a virtual machine (vmware or virtualbox)
  - Exams (theory and lab) using the your own laptop
  - Telematics consults through Google Meet
Conditions of presence (UPC)

- It is not possible to attend to a non-enrolled group
- It is mandatory to use masks and keep security social distance
- Ventilated classrooms (open windows and doors during lectures)
- Arranged access to classrooms
- Telematics consultation
- You have to sign a document of responsibility statement
What if quarantine or lockdown…

- Adendum in the syllabus: https://www.fib.upc.edu/ca/estudis/graus/grau-en-enginyeria-informatica/pla-desestudis/assignatures/SO

- Streaming of theory lectures for students cannot attend due to COVID-19

- Behavior of Lab sessions under quarantine or lockdown
  - If it is a particular student, it has to notify to its respective lecturer. Thus, the teacher will create a Gmeet during the session to answer doubt during the lab session
  - The assessment methodology is not affected (session deliverable + Atenea test)

- Lab for students with COVID-19
  - She/he has to notify it to the respective lecturer, in addition to the person in charge of COVID of the center
  - It is NOT necessary this person submit deliverables during its disease (although it is suggested to do it asap) and perform the Atenea tests during such period of time
Working in no-presence mode

- If the lectures of a particular group of OS (or all of them) have to be under no-presence mode, it will be notified through RACO
  - Lectures of theory and lab: synchronized sessions through Gmeet
  - The assessment methodology is not changed
**Assessment**

Technical Competences\(=\max(0.4 \cdot \text{CA} + 0.6 \cdot \text{FE}, \text{FE})\)

- **CA: 50% TP + 35% LP + 15% LT**
  - Lessons 1 and 2; Sessions 1, 2, 3 and 4
  - TP: Theory partial
    - Problems and short questions
  - LP: Lab partial
    - Code development
  - LT: Lab Tracking
    - Atenea test on some particular sessions (10%)
    - 2 Mock exams (5%)
  - **Anti-plagiarism rules**: any student who submits codes that are plagiarism will get a 0 grade in the CA component

- **FE: 50% THEORY + 50% LABORATORY**
  - Final exam of the whole course during the days of final exams
  - THEORY
    - Problems and short questions
  - LABORATORY
    - Code development
Communication Channels

- Look at the web page.
  - http://docencia.ac.upc.edu/FIB/grau/SO
  - All the documentation of the course is available here

- RACO (FIB)
  - Dynamic information updates: notifications, exam planning, marks, etc.
  - Deliverables through web
    - Transversal Competence
    - Previous lab homework
    - Lab Sessions
    - Exams