

Computers

Course Presentation

Grau en Ciència i Enginyeria de Dades

Facultat d'Informàtica de Barcelona (FIB)

Universitat Politècnica de Catalunya (UPC)

2021-2022 Q2

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Outline

- Goals
- Lecturers
- Course Description
- Competencies (Technical and Transversal)
- Lectures Description
- Grading
- Scheduling
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Goals

- Introductory understanding about wide range of computer related topics
 - Hardware and software components of a system
 - Operating Systems support
 - Fundamentals of programming
 - Basic software optimization techniques
 - Basic performance analysis
- Course Previous Requirements
 - None
- Previous capacities
 - Basic programming skills

Lecturers

- Teachers
 - Alex Pajuelo
 - Office: C6-E205
 - E-mail: mpajuelo@ac.upc.edu
 - E-mail **Gsuite**: alex.pajuelo@upc.edu
 - Xavi Verdú (coordinator)
 - Office: D6-109
 - E-mail: jverdu@ac.upc.edu
 - E-mail **Gsuite**: javier.verdu@upc.edu

Course and Lectures Description

- **~13h/week Total work**
- 3h/week theory lectures
 - 1 hour lectures
- 2h/week lab sessions
 - **Working in pairs**
- 8h/week on your own, on average

Competences

- Technical
 - **CE4** - Use **current computer systems**, including high performance systems, for the process of large volumes of data from the knowledge of its structure, operation and particularities.
 - Other Generic Competencies: **CG1, CG2, CG4**
- Transversal
 - **CT5** - Effective use of information resources
 - **CT6** - Autonomous Learning
 - **CT7** - Third Language (English)
- Other Basic Competences
 - **CB1 (basic to advanced knowledge), CB2 (professionalism, problem solving), CB5 (high degree of autonomy)**

Theory Lectures

- 1h lectures
 - 3 sessions per week
- Based on slides
- Cooperative learning
 - Questions & exercises related to current topics
 - **Promote engaging discussions!!!!**
- Autonomous learning
 - Homework and fulfill the lab exercises

Lab Sessions

- Complement theory lectures
 - Get experience dealing with the concepts explained in theory lectures
 - Synchronized with theory lectures
- 2h sessions with teacher support
 - In theory classrooms due to healthy protocol
 - Bring your own laptop
 - There is a laptop lending service provided by FIB (<https://www.fib.upc.edu/ca/la-fib/serveis-tic/prestec-de-portatils>)
 - Working in pairs
 - Deliverables to fulfill lab sessions
- Attendance:
 - Not mandatory, but strongly recommended
 - Brief interviews to check the work done → **part of the mark**

Conditions to Physically Attend Lectures (UPC)

- It is mandatory to use masks and keep security social distance
- Ventilated classrooms (open windows and doors during lectures)
- Arranged access to classrooms
- Students will use RACO (i.e. “sóc aquí” tool) to register the classroom distribution of every session (strongly suggested to keep same distribution among sessions)
- Telematics consultation
- You have to sign a document of responsibility statement

What if quarantine or lockdown... (I)

- Adendum in the syllabus
 - <https://www.fib.upc.edu/ca/estudis/graus/grau-en-enginyeria-informatica/pla-destudis/assignatures/COM-GCED>
- If a student is positive for COVID-19 or has to be under preventive quarantine
 - It is important to notify the COM's coordinator and submits the official form to the FIB
 - Streaming of lectures for students cannot attend due to COVID-19
 - The Lab tracking interviews will not be done during this period
 - The student has to keep doing and fulfilling the deliverables, but we can grant wider time flexibility
- Behavior of Lab sessions under quarantine or lockdown
 - The student can join the session through the Gmeet link. during the session to answer doubt during the lab session
 - The deliverables done during the quarantine/lockdown period will not be taken into account, but it is strongly suggestable to do them as soon as possible (the deadline will be delayed as well).
- If there is any assessment event, such as an exam, the event will be delayed for the particular people under quarantine to be done as soon as they can go to the classroom

What if quarantine or lockdown... (II)

- If the lectures of a particular group (or all of them) have to be under no-presence mode, it will be notified through RACO
- In case of Alarm State of global lockdown
 - Additional support material will be provided
 - Additional sessions to solve doubts
 - Lectures and Lab sessions will be synchronally performed
 - Assessment methodology will be exactly the same, but remotely

Grading

- Theory Mark= $\text{MAX}(30\% \text{ PT} + 40\% \text{ FT}; 70\% \text{ FT})$
 - PT: Theory mid-term
 - FT: Final Theory Exam
- Regular Technical Mark = Theory Mark + 20% LS + 10% Labwork
 - LS: Lab Session (**Last week**)
 - Labwork: Brief interviews to checking the work done in labs and delivered
- If fail → Reassessment
 - Reassessment mark substitutes the global theory mark (that is, 70% of the course mark)
 - If the regular assessment mark was 4 or higher and the new mark (including the Reassessment mark) is lower, then we keep the regular mark
- Transversal Competence Mark: Based on lab work

Scheduling

	Dilluns	Dimarts	Dimecres	Dijous	Divendres	
14/02/2022	T0/T1	S1			T1	18/02/2022
21/02/2022	T2	S2			T2	25/02/2022
28/02/2022	T2	S3			T3	04/03/2022
07/03/2022	T3	S4			T3	11/03/2022
14/03/2022	T4	S5			T4	18/03/2022
21/03/2022	T4	S6			T5	25/03/2022
28/03/2022	T5	S7			Parcial Teoria	01/04/2022
04/04/2022					T5	08/04/2022
11/04/2022						15/04/2022
18/04/2022		S8			T5	22/04/2022
25/04/2022	T6	S9			T6	29/04/2022
02/05/2022	T6	Simu Prova				06/05/2022
09/05/2022	T6	S10			T7	13/05/2022
16/05/2022	T7	S11			T7	20/05/2022
23/05/2022	T8	Prova Lab			T8	27/05/2022
30/05/2022	T8/Repas				Ex. Final Teoria	03/06/2022
27/06/2022		Ex. Recuperació				01/07/2022

Color	Significat
	Sense classe per dies d'avaluació
	Sense classe per dies no lectius
	Proves d'avaluació de Teoria
	Prova d'avaluació de Lab
	Simulacre Prova Lab

Others

- Web Site:
 - <http://docencia.ac.upc.edu/FIB/GCED/COM>
- Bibliography
 - Basic + complementary (according to lessons needs)
- Other resources
 - RACO
 - Appointments (don't forget sending a previous email)
- Select a Students Representative