



Academic year	2013-14
Subject	10917 - Data Bases and Software Environments for Web Applications
Group	Group 1, 1S
Teaching guide	B
Language	English

Subject identification

Subject	10917 - Data Bases and Software Environments for Web Applications
Credits	1 in-class (25 hours) 4 distance (100 hours) 5 totals (125 hours).
Group	Group 1, 1S(Campus Extens)
Teaching period	1st semester
Teaching language	English

Lecturers

Lecturers	Timetable for student attention					
	Starting time	Finishing time	Day	Start date	Finish date	Office
Ricardo Adolfo Galli Granada gallir@uib.es	There are no defined sessions					
Miguel Mascaró Portells mascport@uib.es	10:00h	12:00h	Tuesday	23/09/2013	15/07/2014	Desp 142

Degrees where the subject is taught

Degree	Character	Course	Studies
Master's Degree in Information Technologies	Optional		Postgraduate degree

Contextualisation

Database oriented applications development for web services. During the course we will study major development methodologies, concepts and we will review specific persistence systems (DBMS) and development frameworks for Java and Python.

Note: half of the course will be in Spanish, the second in English (Python, MySQL and Django).

Requirements

Knowledge in programming, dynamic programming languages and databases.

Skills

Specific

1. Mastering of web programming scenarios..





Academic year	2013-14
Subject	10917 - Data Bases and Software Environments for Web Applications
Group	Group 1, 1S
Teaching guide	B
Language	English

2. Understanding of Internet and Web architecture and protocols..
3. Ability to differentiate between the features of a traditional web and client application and ones based on users collaboration..
4. Design of web applications based on the Model-View-Controller (MVC) pattern..
5. Ability to create a web user interface from a basic design..
6. Knowledge, advantages and disadvantages of the different database programming patterns..
7. Ability to split into modules to develop a web system based on the Model-View-Controller..
8. Ability to develop a complete web system based on Web 2.0 technologies..

Content

Introduction to Web applications and philosophy of Web programming. Internet and its services. Web development and operations. MVC pattern for web development.

Theme content

T1. Databases

T2. MVC pattern

T3. Web operations

Java. Java MVC development

Python. Python MVC development (Django)

Teaching methodology

In-class work activities

Modality	Name	Typ. Grp.	Description
Theory classes	Lectures	Large group (G)	Introduction to the theory and examples with slides.

Distance education work activities

Modality	Name	Description
Individual self-study	Java Project	Development of a web project in Java using MVC pattern.
Individual self-study	Python Project	Development of a web project in Python-Django using the MVC pattern





Academic year	2013-14
Subject	10917 - Data Bases and Software Environments for Web Applications
Group	Group 1, 1S
Teaching guide	B
Language	English

Specific risks and protective measures

The learning activities of this course do not entail specific health or safety risks for the students and therefore no special protective measures are needed.

Workload estimate

Modality	Name	Hours	ECTS	%
In-class work activities		25	1	20
Theory classes	Lectures	25	1	20
Distance education work activities		100	4	80
Individual self-study	Java Project	50	2	40
Individual self-study	Python Project	50	2	40
Total		125	5	100

At the beginning of the semester a schedule of the subject will be made available to students through the UIBdigital platform. The schedule shall at least include the dates when the continuing assessment tests will be conducted and the hand-in dates for the assignments. In addition, the lecturer shall inform students as to whether the subject work plan will be carried out through the schedule or through another way included in the Campus Extens platform.

Student learning assessment

Java Project

Modality	Individual self-study
Technique	Papers and projects (Retrievable)
Description	Development of a web project in Java using MVC pattern.
Assessment criteria	Design, features, coding, code readability, user interface.

Percentage of final qualification: 50% following path A





Academic year	2013-14
Subject	10917 - Data Bases and Software Environments for Web Applications
Group	Group 1, 1S
Teaching guide	B
Language	English

Python Project

Modality	Individual self-study
Technique	Papers and projects (Retrievable)
Description	Development of a web project in Python-Django using the MVC pattern
Assessment criteria	Design, features, coding, code readability, user interface.

Percentage of final qualification: 50% following path A

Resources, bibliography and additional documentation

They will provided during the course, with links in the Virtual Campus.

Basic bibliography

Complementary bibliography

Other resources

