

Academic Year: ( 2021 / 2022 )

Review date: 26-06-2021

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: ZARRAONANDIA AYO, TELMO AGUSTIN

Type: Electives ECTS Credits : 6.0

Year : 4 Semester :

**REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)**

- Programming (Course: 1 / Semester: 1)
- User Interfaces (Course: 3 / Semester: 1)

**DESCRIPTION OF CONTENTS: PROGRAMME**

- 1- Development of distributed components
- 2- Web programming
- 3- Web application design patterns
- 4- Techniques for asynchronous communications with servers
- 5- MVC architectures (Vista-Controller Model)
- 6- Persistence engines
- 7- Web development for specific platforms

**LEARNING ACTIVITIES AND METHODOLOGY**

- \* Theoretical lectures: 1.5 ECTS. To achieve the specific cognitive competences of the course. Besides, to develop transversal competences as capacity to analysis and abstraction.
- \* Practical lectures: 1 ECTS. To develop the specific instrumental competences. Besides, to develop transversal competences as problem solving and knowledge application.
- \* Continuous assessment exercises: 1,5 ECTS. Initiated during the practical sessions and finished out of them. Their objective is to complete the development of the specific instrumental competences and to initiate the development of the attitudinal specific competences as well as the transversal competences on problem solving and knowledge application.
- \* Practice: 2 ECTS. Carried out without the presence of the teacher. Their objective is to complete and integrate the development of the specific competences and transversal competences by means of practice cases in which the problem, solving method, criteria for selecting the solving method, the results and their interpretation are well documented.
- \* Tutorships: Teacher assistance
- \* Exercises and examination: 0,5 ECTS. To complete the development of specific cognitive and procedural capacities

**ASSESSMENT SYSTEM**

Continuous assessment: 60%  
Final exam: 40%

Minimum mark exam: 3 (over 10)

<b>% end-of-term-examination:</b>	40
<b>% of continuous assessment (assignments, laboratory, practicals...):</b>	60

**BASIC BIBLIOGRAPHY**

- Allamaraju, Subrahmanyam Programación Java Server con J2EE Edición1.3, Anaya.
- Allamaraju, Subrahmanyam Programación Java Server con J2EE Edición1.3, Anaya.
- Brett McLaughlin Java and XML, O`Reilly UK.
- Bruce W. Perry Java Servlet & JSP Cookbook, O`Reilly UK.

- Budi Kurniawan Java Web Developments with Servlets, JSP and EJB, Sams.
- Elizabeth Castro XML for the World Wide Web, Peachpit Press.
- Hugh E. Williams, David Lane Web Database Applications with PHP and MySQL, O`Reilly UK.

#### ADDITIONAL BIBLIOGRAPHY

- <http://biblioteca.uc3m.es/uhtbin/cgiirsi/x/uc3m/0/5?searchdata1=^B648> -, -.