Universida_{de}Vigo

IDENTIFYING DATA
New computerised services

Subject	New computerised services
Code	V05G301V01405
Study programme	Grado en Ingeniería de Tecnologías de Telecomunicación

Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Optional	4th	1st

Teaching language	Spanish
Department	
Coordinator	Álvarez Sabucedo, Luis Modesto
Lecturers	Álvarez Sabucedo, Luis Modesto Santos Gago, Juan Manuel
E-mail	lsabucedo@det.uvigo.es
Web	http://moovi.uvigo.gal/
General description	The global aim of the course is to provide the students with a global outlook of the new technologies in the area of the telematic services. Therefore, the contents of this course will be open and in line with the technological evolution in the most active fields of the new technologies. The subject will be taught in Spanish and the contents will be available in English.

Training and Learning Results

Code	
B4	CG4: The ability to solve problems with initiative, to make creative decisions and to communicate and transmit knowledge and skills, understanding the ethical and professional responsibility of the Technical Telecommunication Engineer activity.
B9	CG9: The ability to work in multidisciplinary groups in a Multilanguage environment and to communicate, in writing and orally, knowledge, procedures, results and ideas related with Telecommunications and Electronics.
C89	(CE89/OP32) The ability to design and construct new computer services.
D4	CT4 Encourage cooperative work, and skills like communication, organization, planning and acceptance of responsibility in a multilingual and multidisciplinary work environment, which promotes education for equality, peace and respect for fundamental rights.

Expected results from this subject

Expected results from this subject	Training and Learning Results		
Identify new fields of application of the telematic services.	B4	C89	D4
Knowledge of the main tools and environments for the development of new telematic services.	B4 B9		
Obtain skills to develop new telematic services.		C89	

Contents

Topic	
Supporting technologies	PWA Support for recommendations Distributed Web
Horizontal services	IoT Cloud Computing Big data Blockchain
eServices	eLearning, eCommerce, eGovernment

Introduction to quantum science   Information management
                                               Transmission models
                                               Introduction to computing

Planning

	Class hours	Hours outside the classroom	Total hours
Lecturing	16	40	56
Laboratory practical	14	28	42
Case studies	5	25	30
Introductory activities	3	6	9
Essay	1	3	4
Essay	1	4	5
Essay questions exam	2	2	4

*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies

	Description
Lecturing	Theoretical contents and their practical application will be presented during the lectures. Student are expected to play an active role during lectures.This methodology will impact in all the competences addressed in the subject. The following learning outcomes will be supported: B4, B9, C89 and D4.
Laboratory practical	During practical sessions, it will be developed a semantic project with the support of adhoc software tools. This methodology will impact in all the competences addressed in the subject. The following learning outcomes will be supported: B4, B9, C89 and D4.
Case studies	Use cases will presented to the students. Thus, they will be able to analyze and to study them in depth in order to prepeare their academic projects. This methodology will impact in all the competences addressed in the subject. The following learning outcomes will be supported: B4, B9, C89 and D4.
Introductory activities	Program of the subject will be presented along with the methodologies used, the classroom, practical contents, final project, final and continuous evaluation criteria, and, in general, all aspects of the subject. This methodology will impact in all the competences addressed in the subject. The following learning outcomes will be supported: B4, B9, C89 and D4.

Personalized assistance

Methodologies	Description
Lecturing	During these sessions, any questions that may arise will be addresseed. Also during the tutoring sesions, questions that may arise will be resolved. For tutoring support, check: https://moovi.uvigo.gal/user/profile.php?id=11296 and https://moovi.uvigo.gal/user/profile.php?id=11599
Laboratory practical	In the practical sessions, a closer attention will be paid to the tasks assigned to the students. Also, any questions that may arise will be addressed. Also during the tutoring sesions, questions that may arise will be resolved. For tutoring support, check: https://moovi.uvigo.gal/user/profile.php?id=11296 and https://moovi.uvigo.gal/user/profile.php?id=11599
Case studies	In these sessions, any questions that may arise will be addressed. Also during the tutoring sesions, questions that may arise will be resolved. For tutoring support, check: https://moovi.uvigo.gal/user/profile.php?id=11296 and https://moovi.uvigo.gal/user/profile.php?id=11599

Tests	Description
Essay	In these sessions, any questions that may arise will be addressed. Also during the tutoring sesions, questions that may arise will be resolved. For tutoring support, check: https://moovi.uvigo.gal/user/profile.php?id=11296 and https://moovi.uvigo.gal/user/profile.php?id=11599
Essay	In these sessions, any questions that may arise will be addressed. Also during the tutoring sesions, questions that may arise will be resolved. For tutoring support, check: https://moovi.uvigo.gal/user/profile.php?id=11296 and https://moovi.uvigo.gal/user/profile.php?id=11599
Essay questions exam	In these sessions, any questions that may arise will be addressed. For tutoring support, check: https://moovi.uvigo.gal/user/profile.php?id=11296 and https://moovi.uvigo.gal/user/profile.php?id=11599

Assessment

	Description	Qualification	Training and Learning Results		
Essay	It will consist of the presentation of two practical-projects using the concepts presented in the subject. It will take place during the development of the course. Marks of each work will be the same for all the members in the group.	35	B4 B9	C89	D4
Essay	It will consist of the presentation of a project that carries out a telematic-based solution. It will take place at the end of the course. Marks of each work will be the same for all the members in the group.	25	B4 B9	C89	D4
Essay questions exam	It will involve all the contents of the course. It will take place at the end of the course	40	B4 B9	C89	

Other comments on the Evaluation

The subject can be approved following the continuous assesment or global assesment.

Students who sit for any of the continuous assessment tests cannot be evaluated as "Not presented" and will not be able to opt for the exam-only modality.

Continuous assessment

The weight and content of each of the continuous assessment parts are as follows:

  1.- Essay 1 (35%): It will consist of the presentation of 2 practical-projects (specified during the course and in the form of practical-projects) with the same weight. They will be carried out in the laboratory sessions.

  2.- Essay 2 (25%): It will consist of a presentation of a complete project, in which models based on telematic services will be used. It will be carried out in the last laboratory session.

  3.- Essay questions exam (40%): It will cover all the contents of the course.

Works 1 and 2 will have a single grade for all the members of the group. It is mandatory to obtain a minimum of 50% of the assessment in tasks 1 and 2. In the question exam it will be necessary to get 40% of the maximum score.

Global assessment

 It will consist of a written test in which all the content of the course can be included. The student will be able to reach a grade of 10 with this option. In addition to the written test, students who appear for this final exam must carry out a project similar to Essay 2. These works must be original.

Plagiarism is regarded as serious dishonest behavior. If any form of plagiarism is detected in any of the tests or exams, the final grade will be FAIL (0), and the incident will be reported to the corresponding academic authorities for prosecution

 It is a necessary condition to pass the subject to obtain a passing grade in each delivery.

 Extraordinary opportunity and Call for end-of-program

 The same considerations as the global assessment will follow.

Plagiarism is regarded as serious dishonest behavior. If any form of plagiarism is detected in any of the tests or exams, the final grade will be FAIL (0), and the incident will be reported to the corresponding academic authorities for prosecution

Sources of information

Basic Bibliography

Professors, **Lecture Slides**,

Complementary Bibliography

R. Baeza-Yates y B. Ribeiro-Neto., **Modern Information Retrieval**,

Arvind Arasu, Junghoo Cho, Hector Garcia-Molina, Andreas Paepcke, and Sriram Raghavan, **Searching the Web**, 2001

Ethereum Development Documentation,

Juan Benet, **IPFS - Content Addressed, Versioned, P2P File System**,

Aplicaciones Web Progresivas,

Stuart Russell y Peter Norvig, **Artificial Intelligence: A Modern Approach**, 4, 2021

Recommendations

Subjects that it is recommended to have taken before

Internet Services/V05G301V01301