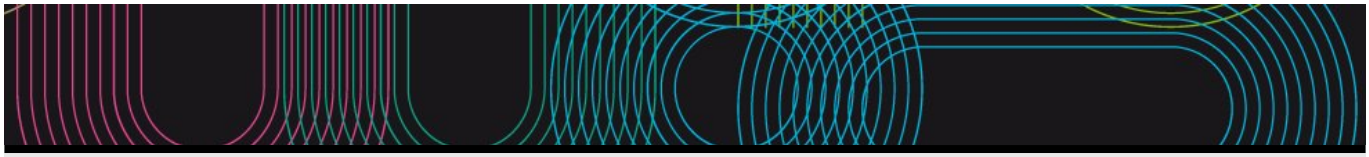

IDENTIFYING DATA				
New computerised services				
Subject	New computerised services			
Code	V05G300V01945			
Study programme	Degree in Telecommunications Technologies Engineering			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Optional	4th	1st
Teaching language	Spanish			
Department	Telematics Engineering			
Coordinator	Álvarez Sabucedo, Luis Modesto			
Lecturers	Álvarez Sabucedo, Luis Modesto Santos Gago, Juan Manuel			
E-mail	lsabucedo@det.uvigo.es			
Web	http://faitic.uvigo.es			
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.			

Competencies	
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.

Learning outcomes			
Expected results from this subject	Training and Learning Results		
To identify new applications of telematic services.	B4	C89	D4
Knowledge of the main tools and environments for the development of new telematics services.	B4 B9		
To acquire skills to develop new telematic services.		C89	

Contents	
Topic	
Basic and support technologies	Semantic technologies Information retrieval REST services
Horizontal services	IoT Cloud Computing Big Data Blockchain

eServices	eLearning eGovernment eCommerce Methods of Payment on the web. Cryptocurrencies.

Planning			
	Class hours	Hours outside the classroom	Total hours
Lecturing	16	40	56
Laboratory practices	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.
Laboratory practices	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.
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.
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.

Personalized attention	
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.
Laboratory practices	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.
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.
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.
Essay	In these sessions, any questions that may arise will be addressed. Also during the tutoring sesions, questions that may arise will be resolved.
Essay questions exam	In these sessions, any questions that may arise will be addressed.

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.	25	B4 B9	C89
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

Essay questions exam	It will involve all the contents of the course. It will take place at the end of the course	50	B4 B9	C89

Other comments on the Evaluation

1. Continuous assessment

The subject will be taught in Spanish and the contents will be available in English.

The course can be passed with full marks from continuous assessment, with no need to sit the final exam.

Students who sit any of the assessment tests may not be listed as "Not Present".

The weighting and content of each continuous assessment test are as follows:

Assessment 1 (50%):

· All contents presented along the course.

· It will take place at the end of the course.

Assessment 2 (25%):

· It will consist of the presentation of a practical-projects (specified in due course).

Assessment 3 (25%):

· It will consist of a presentation of a holistic project involving telematic based services

· At the end of the course.

It is mandatory to pass each part of the continuous assessment (that is, the minimum score of each part must be 5 out of 10). In case of not passing any part of the continuous evaluation, the remaining grades will be adjusted by a factor of 0.5.

All students presenting a project will get the same marks.

The course may be passed only with continuous assessment.

2. Single assessment

· There is a final exam at the end of the semester and another at the end of the course. All content presented along the course is included in this exam.

· Students sitting this final exam will be asked to submit in advance some works to be done according to specific instructions on each call. These works must be original and will involve task related to assessments 2 and 3. Should the work not be original, the student will be banned from the subject. The pass mark for this test is 5 out of 10. It is mandatory to pass the project presentation also.

Sources of information

Basic Bibliography

Professors of the subject, **Slides for classes**, http://faitic.uvigo.es,

Complementary Bibliography

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

Gómez-Pérez, A.; Fernández-López, M.; Corcho, O, **Ontological Engineering**, Springer-Verlag,

Arasu, A., Cho, J., García-Molina, H., Paepcke, A., y Raghavan, S., **Searching the web**, ACM Transactions on Internet Technology, Vol. 1, N,

S. Chakrabarti, B. Dom, D. Gibson, J. Kleinberg, P. Raghavan, and S. Rajagopalan., **Automatic resource compilation by analyzing hyperlink structure and associated text.**, In Proceedings of the 7th World-wide web conferenc,

S. Brin y L. Page, **The anatomy of a large-scale hypertextual Web search engine.**, 7th International World Wide Web Conference, Brisb,

Lassila, O., y Swick,R.R., **Resource Description Framework (RDF) Model and Syntax Specification**, World Wide Web Consortium Recommendation. Accesib,

Deborah L. McGuinness, **Ontologies Come of Age**, http://www.ksl.stanford.edu/people/dlm/papers/onto,

Grigoris Antoniou and Frank van Harmelen, **Web Ontology Language: OWL**, http://www.cs.vu.nl/~frankh/postscript/OntoHandboo,

Resource Description Framework (RDF) Model and Syntax Specification, http://w3c.org/RDF,

DCMI Home, http://dublincore.org,

IEEE Learning Technology Standards Committee (LTSC), http://ltsc.ieee.org/wg12. Standard accesible en,

W3C Semantic Web Activity, http://www.w3.org/2001/sw/,

Recommendations