SUBJECT TEACHING GUIDE

G671 - Quality and Auditing

Degree in Computer Systems Engineering

Academic year 2016-2017

1. IDENTIFYING DATA					
Degree	Degree in Computer Systems Engineering			Type and Year	Optional. Year 4
Faculty	Faculty of Sciences				
Discipline	Subject Area: Software Engineering Mention in Software Engineering				
Course unit title and code	G671 - Quality and Auditing				
Number of ECTS credits allocated	6	Term	Semester based (1)		
Web					
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. INGENIERÍA INFORMÁTICA Y ELECTRÓNICA
Name of lecturer	CARLOS BLANCO BUENO
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Other lecturers	MIGUEL SIERRA SANCHEZ ALEJANDRO PEREZ RUIZ

3.1 LEARNING OUTCOMES
- Know the main models of software process and product quality.
- Understanding the modelling and specification of software processes.
- Carry out the evaluation of processes and organizations that develops software using official standards.
- Knowing the basics of improving software process.
- Know the main activities performed on software audit.

4. OBJECTIVES

Being able to analyze product quality and develop action plans for its improvement.
Know aspects related with process quality, evaluation and improvement.
Being able to perform IT audits.

6. COURSE ORGANIZATION

	CONTENTS
1	QUALITY OF INFORMATION SYSTEMS. Definitions of quality and concept of quality in use. Introduction to relevant quality models and standards (ISO 9001, ISO 25000, CMMI).
2	PRODUCT QUALITY. Internal and external product quality. Models, evaluation and measurement (ISO 25000). Software tools for analysing product quality.
3	PROCESS QUALITY. Process evaluation and improvement (CMMI). Auditing.
4	SECURITY. Security in the organisation and technology. Norms and regulations (LOPD, ENS).

7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Project development	Work	Yes	Yes	60,00
Continuous evaluation of the theoretical part	Work	Yes	Yes	40,00
TOTAL				100,00

Observations

Observations for part-time students

Part-time students can achieve all the theoretical activities and the majority of the practical activities by distance working.
In this way, they can establish their working hours according to their profesional and personal constraints.

Those part-time students who have not followed the continuous assessment will be assessed with a final written exam:
40% (for the theoretical part) and a project development: 60% (for the practical part).

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

Piattini, M., García, F., García-Rodríguez de Guzmán, I., Pino, F. Calidad de Sistemas de Información (3º Ed.). Ra-Ma. 2015

Del Peso, E., Del Peso, M, Piattini, M. Auditoría de Tecnologías y Sistemas de Información. Ra-Ma. 2008

Campbell, G. y Papapetrou, P. Sonar Qube in action. Manning Publications Co. 2014

Girones, J. El gran libro de Android (5ªEd). Marcombo. 2015.