UNIVERSIDADE DA CORUÑA

Teaching Guide				
Identifying Data				2019/20
Subject (*)	Information Systems Standards		Code	614G01044
Study programme	Grao en Enxeñaría Informática			
Descriptors				
Cycle	Period	Year	Type	Credits
Graduate	2nd four-month period	Third	Optional	6
Language	SpanishGalicianEnglish			
Teaching method	Face-to-face			
Prerequisites				
Department	Ciencias da Computación e Tecnoloxías da InformaciónComputación			
Coordinador	Parapar López, Javier	E-mail	javier.parapar@udc.es	
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General description	In this course we will tackle the conceptual and theoretical foundations associated with the work of a IS Auditor. The work of a IS Auditor is to ensure that information systems safeguard the assets of the organization, maintaining the integrity of the data and achieve business objectives in an efficient and effective way. The quality assurance requirements for information systems determine the daily operation of enterprises and organizations and justify the task of auditing information systems. This course will detail the classical process of the Information Systems Audit, its implications for corporate IT Governance, strategies for asset protection in information systems, plans for business continuity after disaster situations and regulatory issues and laws on data protection in Information Systems. The knowledge acquired by students in this course follows the recommendations of the "Information Systems Audit and Control Association" which offers certification of Certified Information System Auditor. After completing the course the student should know the procedures, controls and reports required to carry out an Information Systems Audit.			

Study programme competences / results	
Code	Study programme competences / results
A47	Capacidade para determinar os requisitos dos sistemas de información e comunicación dunha organización de acordo cos aspectos de seguridade e cumprimento da normativa e a lexislación vixente.
A51	Capacidade para comprender e aplicar os principios e as técnicas de xestión da calidade e da innovación tecnolóxica nas organizacións.
B1	Capacidade de resolución de problemas
B3	Capacidade de análise e síntese
B7	Preocupación pola calidade
B8	Capacidade de traballar nun equipo interdisciplinar
C6	Valorar criticamente o coñecemento, a tecnoloxía e a información dispoñible para resolver os problemas cos que deben enfrontarse.

Learning outcomes			
Learning outcomes	Study programme competences / results		
Information Systems Audit	A47 A51	B1 B3 B7 B8	C6
Information Systems Quality Assurance	A51	B3 B7	C6
Information Systems Control	A47	B3 B7	

Contents	
Topic	**Sub-topic**
Unit 1: Introduction to the Quality Assurance Concept in Information Systems.	Concept, needs, requirements. QA Levels and tasks. Quality Management Systems. QA planning and quality reviews
Unit 2: IS Auditing process	Concept, needs, functions Risk assessment Internal Controls Audit planning and audit evidences Performing an IS Audit
Unit 3: IT Governance	Concept and needs IS strategies vs corporative strategies. Frameworks: COBIT. Auditing IT governance structures. Risk management
Unit 4: Protection of Information Assets	Concept and needs IS Protection Logical and applied protection of IS Physical protection of IS infrastructure. Security frameworks auditing.
Unit 5: Business continuity plans and recovering after disasters.	General concepts. Business continuity planning and components. Auditing the BCP
Unit 6: Legal aspect in IS	Spanish regulatory framework. Data protection regulation.

Planning				
Methodologies / tests	**Competencies / Results**	**Teaching hours (in-person & virtual)**	**Student?s personal work hours**	**Total hours**
Workbook	B3	2	7	9
Case study	B1 B8	10	25	35
Mixed objective/subjective test	A51 B1 B7 C6	2	0	2
Supervised projects	A47 B1 B3 B7	7	21	28
Guest lecture / keynote speech	A47 A51 B7	19	57	76
Personalized attention		0	0	0
(*)The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.				

Methodologies	
Methodologies	**Description**
Workbook	Readings for consolidating and complement the knowledge acquired by the student during the lessons. Topics: techniques, applications and information systems.
Case study	Case studies with problem analysis and achieved solutions.
Mixed objective/subjective test	In this test the knowledge acquired by the student about the theoretical and operative topics covered during the course will be evaluated.
Supervised projects	A set of guided works proposed by the professor will be developed by the students individually or in groups.
Guest lecture / keynote speech	Lectures for the exposition of the theoretical aspects of the course using different resources such as blackboard, slides, beamer, demonstrations, and online teaching tools.

Personalized attention	
Methodologies	**Description**
Supervised projects	Guided works will be proposed by the professor to be solved by the students

Assessment			
Methodologies	**Competencies / Results**	**Description**	**Qualification**
Case study	B1 B8	Case studies for the independent working of the students and student participation in the lectures. It is mandatory to achieve at least the 40% of the marks in order to pass the course	40
Mixed objective/subjective test	A51 B1 B7 C6	Questions about the acquired knowledge. Questions involving critical reasoning for solving practical problems of the real world. It is mandatory to achieve at least the 40% of the marks in order to pass the course	40
Supervised projects	A47 B1 B3 B7	Tracking of the working process and evaluation of the final output from the students. It is mandatory to achieve at least the 40% of the marks in order to pass the course	20

Assessment comments
Para a segunda oportunidade e as convocatorias non ordinarias, tanto as prácticas e traballos como a teorías avaliaranse no exame mixto. En lo referente a alumnos en regimen parcial, no se dispensará la asistencia a las actividades donde se realice evaluación.

Sources of information	
Basic	- Sandra Senft y Frederick Gallegos (2008). Information Technology Control and Audit. Auerbach Publishers Inc - Chris Davis, Mike Schiller, Kevin Wheeler (2006). IT Auditing: Using Controls to Protect Information Assets. McGraw-Hill - ISACA (2012). Cobit 5: A Business Framework for the Governance and Management of Enterprise IT.. - ISACA (). http://www.isaca.org. - Mario G. Piattini Velthuis, Félix O. García Rubio, Ignacio García Rodríguez de Guzmán, Francisco J. (2015). Calidad de sistemas de información 2nd ed. RAMA
Complementary	

Recommendations
Subjects that it is recommended to have taken before
Subjects that are recommended to be taken simultaneously
Subjects that continue the syllabus
Other comments

(*)The teaching guide is the document in which the URV publishes the information about all its courses. It is a public document and cannot be modified. Only in exceptional cases can it be revised by the competent agent or duly revised so that it is in line with current legislation.