Teaching Guide				
Identifying Data				2020/21
Subject (*)	Biomedical knowledge management		Code	614522022
Study programme	Mestrado Universitario en Bioinformática para Ciencias da Saúde			
Descriptors				
Cycle	Period	Year	Type	Credits
Official Master's Degree	1st four-month period	Second	Optional	3
Language	SpanishEnglish			
Teaching method	Hybrid			
Prerequisites				
Department	Ciencias da Computación e Tecnoloxías da InformaciónComputación			
Coordinador	Parapar López, Javier	E-mail	javier.parapar@udc.es	
Lecturers	Parapar López, Javier	E-mail	javier.parapar@udc.es	
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General description	In this course, we will explore the theoretical concepts of information management, as well as the software and tools for obtaining, extracting, labelling, visualising and exploiting biomedical knowledge. We will explore the syntactic and semantic modelling of information, methods of obtaining and collecting information, methods of integration, extraction and terminological labelling, standards for semantic representation of biomedical information, and techniques for analysis and visualisation of knowledge			
Contingency plan	1. Modificacións nos contidos -No se contemplan modificación de los contenidos 2. Metodoloxías -No se contemplan modificaciones de metodologías, solo 3. Mecanismos de atención personalizada ao alumnado -Las tutorías serán online en cualquier caso 4. Modificacións na avaliación -No se contemplan modicaciones en las formas de evaluar, solo cambiará el formato que podrá ser presencial u online según la situación 5. Modificacións da bibliografía ou webgrafía: -No se contemplan			

Study programme competences / results	
Code	Study programme competences / results
A6	CE6 - Ability to identify software tools and most relevant bioinformatics data sources, and acquire skill in their use
B3	CB8 - Students to be able to integrate knowledge and deal with the complexity of making judgements from information that could be incomplete or limited, including reflections on the social and ethical responsibilities linked to the application of their skills and judgments
B6	CG1 -Search for and select the useful information needed to solve complex problems, driving fluently bibliographical sources for the field
C3	CT3 - Use the basic tools of the information technology and communications (ICT) necessary for the exercise of their profession and lifelong learning
C8	CT8 - Rating the importance that has the research, innovation and technological development in the socio-economic and cultural progress of society

Learning outcomes			
Learning outcomes	Study programme competences / results		
Coñecer comprender e analizar os distintos modelos de xestión e explotación de coñecemento na área da de investigación biomédica, para a súa implementación e uso eficiente.	AJ6	BJ6	CJ3

Coñecer comprender e analizar as plataformas e ferramentas software para a implementación de técnicas que xestionen e exploten información biomédica.	AJ6	BJ3 BJ6	
Planear e deseñar avaliacións de métodos, técnicas e sistemas existentes e capacidade de análise os resultados das devanditas avaliacións.		BJ3 BJ6	CJ3 CJ8
Coñecer, comprender e aplicar correctamente os condicionantes éticos, de privacidade e confidencialidade dos datos e coñecemento tratado.			CJ8

Contents	
Topic	**Sub-topic**
Introduction	-
Standards for biomedical information	-
Resources for biomedical information	-
Exploitation of biomedical information	-
Ethical and legal aspects	-

Planning				
Methodologies / tests	**Competencies / Results**	**Teaching hours (in-person & virtual)**	**Student?s personal work hours**	**Total hours**
Laboratory practice	C3 C8	8	22	30
Supervised projects	B3 B6	2	9	11
Mixed objective/subjective test	A6 B3 B6 C3 C8	0	1	1
Guest lecture / keynote speech	A6 B3	11	22	33
Personalized attention		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**
Laboratory practice	Use of standards, resources and methods of exploitation to solve problems
Supervised projects	Tutored work proposed by the teacher and developed by students either in groups or individually.
Mixed objective/subjective test	The mastery of theoretical and operative knowledge of the subject will be evaluated.
Guest lecture / keynote speech	Lessons about the contents of the subject by encouraging student participation

Personalized attention	
Methodologies	**Description**
Laboratory practice Supervised projects	The teacher will advise the particular problems of each student taking into account their degree of effort and participation during the lessons

Assessment			
Methodologies	**Competencies / Results**	**Description**	**Qualification**
Mixed objective/subjective test	A6 B3 B6 C3 C8	Questions about acquired knowledge. Questions that involve reasoning based on the knowledge acquired to solve practical problems of real interest. It is mandatory to reach 40% of the grade to pass the subject	50

Laboratory practice	C3 C8	Correction and completeness of the practices proposed for the proper use of the explained tools. It is mandatory to reach 40% of the grade to pass the subject	40
Supervised projects	B3 B6	Follow up of the work and evaluation on the result achieved and individual participation of the students in the classes. It is mandatory to reach 40% of the grade to pass the subject	10

Assessment comments
For the second opportunity and not ordinary exams, both practice and theory will be evaluated in the mixed exam. If the minimum grade in the different tests is not reached, the maximum grade of the student will be 4.5. For part-time students, the grading scale and continuous assessment are the same as for other students. If plagiarism is detected the student will not pass the subject.

Sources of information	
Basic	- Pease, Cooper & Gururajn (2010). Biomedical Knowledge Management.
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.