



## Teaching Guide

Identifying Data					2017/18
Subject (*)	Practicum (professional practice)		Code	614522018	
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	Optativa	3	
Language	SpanishGalicianEnglish				
Teaching method	Face-to-face				
Prerequisites					
Department					
Coordinador	Pereira Loureiro, Javier	E-mail	javier.pereira@udc.es		
Lecturers	Pereira Loureiro, Javier	E-mail	javier.pereira@udc.es		
Web	www.fic.udc.es				
General description	<p>Esta materia permite que o alumno poida adquirir as competencias da titulación a través de traballo en empresas ou institucións públicas. O seu obxectivo é completar a formación do mestrado con estancias nestas entidades colaboradoras nas que experimentar o desenvolvemento da actividade de investigación ou profesional nunha contorna productiva. Dende a Facultade de Informática establécense convenios con distintas empresas ou institucións para a realización destas prácticas curriculares.</p> <p>Na web da Facultade de Informática irase informando dos convenios ya establecidos, non sendo una lista pechada senon que está aberta a novas relación en función do interese das empresas o dos estudantes.</p> <p>Estas prácticas terán un titor académico asignado pola comisión académica e un titor da empresa designado pola propia empresa.</p>				

## Study programme competences

Code	Study programme competences
A3	CE3 ? To analyze, design, develop, implement, verify and document efficient software solutions based on an adequate knowledge of the theories, models and techniques in the field of Bioinformatics
A6	CE6 - Ability to identify software tools and most relevant bioinformatics data sources, and acquire skill in their use
A7	CE7 - Ability to identify the applicability of the use of bioinformatics tools to clinical areas.
B1	CB6 - Own and understand knowledge that can provide a base or opportunity to be original in the development and/or application of ideas, often in a context of research
B2	CB7 - Students should know how to apply the acquired knowledge and ability to problem solving in new environments or little known within broad (or multidisciplinary) contexts related to their field of study
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
B4	CB9 - Students should know how to communicate their findings, knowledge and latest reasons underpinning them to specialized and non-specialized audiences in a clear and unambiguous way
B5	CB10 - Students should possess learning skills that allow them to continue studying in a way that will largely be self-directed or autonomous.
B8	CG3 - Be able to work in a team, especially of interdisciplinary nature
C3	CT3 - Use the basic tools of the information technology and communications (ICT) necessary for the exercise of their profession and lifelong learning
C5	CT5 - Understand the importance of entrepreneurial culture and know the means available to enterprising people
C6	CT6 - To assess critically the knowledge, technology and information available to solve the problems they face to.
C7	CT7 ? To maintain and establish strategies for scientific updating as a criterion for professional improvement.
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		
Poseer experiencia real sobre a actividade de investigación ou profesional dentro das empresas ou institucións públicas no ámbito da bioinformática e a informática da saúde	AJ3 AJ6 AJ7	BJ1 BJ2 BJ3 BJ4 BJ5 BJ8	CJ3 CJ5 CJ6 CJ7 CJ8

Contents	
Topic	Sub-topic
Prácticas en empresa	As prácticas realízanse en empresas e institucións do ámbito da bioinformática e tecnoloxía aplicada as ciencias da vida e da saúde

Planning				
Methodologies / tests	Competencies	Ordinary class hours	Student's personal work hours	Total hours
ICT practicals	A3 A6 A7 B1 B2 B3 B4 B5 B8 C3 C5 C6 C7 C8	0	70	70
Personalized attention		5	0	5

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

Methodologies	
Methodologies	Description
ICT practicals	As prácticas van a depender do tipo de centro onde se leva a cabo o traballo que dependerá tamén do perfil do estudante.

Personalized attention	
Methodologies	Description
ICT practicals	Débese destacar particularmente a importancia do papel do profesor tutor, esencial para un axeitado aproveitamento da estancia do estudante, así como para facilitar a relación da Facultade cas empresas colaboradoras.

Assessment			
Methodologies	Competencies	Description	Qualification



ICT practicals	A3 A6 A7 B1 B2 B3 B4 B5 B8 C3 C5 C6 C7 C8	<p>O estudante informará ao titor académico das tarefas que está a realizar.</p> <p>Ao rematar a práctica, o estudante entregará un informe donde enumere e explique en detalle as tarefas realizadas, a contorna tecnolóxica utilizada -ferramentas, estándares e metodoloxías-, evitando as cuestións que poidan considerarse confidenciais. A extensión recomendada é de aproximadamente 3 páxinas.</p> <p>O titor profesional entregará un informe avaliando a actividade do estudante.</p> <p>O titor académico avaliará a práctica e emitirá un informe final:</p> <ul style="list-style-type: none"><li>- Valoración da memoria: 50%</li><li>- Valoración do titor profesional: 50%</li></ul> <p>Estas porcentaxes é orientativa e poderá modificarse en función do criterio do titor</p>	100
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### Assessment comments

Na

web da Facultade de Informática irase informando dos convenios ya establecidos, non sendo una lista pechada senon que está aberta a novas relación en función do interese das empresas o dos estudantes.

Estas prácticas terán un titor académico asignado pola comisión académica e un titor da empresa designado pola propia empresa

### Sources of information

Basic	
Complementary	

### Recommendations

Subjects that it is recommended to have taken before



Introduction to databases/614522002  
Introduction to molecular biology/614522004  
Genetics and molecular evolution/614522005  
Genomics/614522006  
Data structures and algorithmics for biological sequences/614522013  
Advanced processing of biological sequences/614522020  
New trends and applications in bioinformatics and biomedical engineering/614522021  
Biomedical knowledge management /614522022  
Design and management of research projects/614522023  
Computational intelligence for high dimensional data/614522024  
Biomechanical engineering, sensing and telemedicine/614522014  
Fundamentals of neuroscience/614522015  
Neuroengineering and innovation in neuroscience/614522016  
Health Information Systems/614522017  
Advanced medical visualization/614522019  
Computational intelligence for bioinformatics/614522012  
Fundamentals of bioinformatics/614522008  
Advanced statistical methods in bioinformatics/614522009  
Analysis of biomedical images/614522010  
High performance computing in bioinformatics/614522011  
Introduction to programming/614522001  
Probability. statistics and elements of biomathematics/614522007  
Foundations of Artificial Intelligence/614522003

**Subjects that are recommended to be taken simultaneously**

Master thesis/614522025

**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.