UNIVERSIDADE DA CORUÑA

Teaching Guide

Identifying Data				2015/16
Subject (*)	Modelización Molecular		Code	610509006
Study programme	Mestrado en Investigación Química e Química Industrial			

Descriptors				
Cycle	Period	Year	Type	Credits
Official Master's Degree	1st four-month period	First	Optativa	3
Language	GalicianEnglish			
Teaching method	Face-to-face			
Prerequisites				
Department	Química Fundamental			
Coordinador		E-mail		
Lecturers	Platas Iglesias, Carlos	E-mail	carlos.platas.iglesias@udc.es	
Web				
General description				

Study programme competences	
Code	Study programme competences
A1	Define concepts, principles, theories and specialized facts of different areas of chemistry.
A2	Suggest alternatives for solving complex chemical problems related to the different areas of chemistry.
A4	Innovate in the methods of synthesis and chemical analysis related to the different areas of chemistry
A7	Operate with advanced instrumentation for chemical analysis and structural determination.
A9	Promote innovation and entrepreneurship in the chemical industry and in research.
B2	Students should apply their knowledge and ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study.
B7	Identify information from scientific literature by using appropriate channels and integrate such information to raise and contextualize a research topic
B10	Use of scientific terminology in English to explain the experimental results in the context of the chemical profession
B14	Demonstrate an attitude of respect for the opinions, values, behaviors and practices of others.

Learning outcomes			
Learning outcomes	Study programme competences		
	AC1		
	AC2		
	AC7		
	AC7	BC2	
	AC4		
	AC4		
	AC1		
		BC7	
		BC10	
		BC7 BC10	
		BC14	
		BC2	
		BC2 BC7	
	AC1		
	AC2		

	AC4	
	AC9	
	AC7	

Contents	
Topic	Sub-topic

Planning				
Methodologies / tests	Competencies	Ordinary class hours	Student?s personal work hours	Total hours
ICT practicals	A7 B7 B10 B14	17	6	23
Supervised projects	A2 A4 A9	0	25	25
Mixed objective/subjective test	A1 B10	2	8	10
Guest lecture / keynote speech	A1 B2	4	12	16
Personalized attention		1	0	1
(*)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	
Supervised projects	
Mixed objective/subjective test	
Guest lecture / keynote speech	

Personalized attention	
Methodologies	Description
Supervised projects	

Assessment			
Methodologies	Competencies	Description	Qualification
Supervised projects	A2 A4 A9		40
Mixed objective/subjective test	A1 B10		30
ICT practicals	A7 B7 B10 B14		30

Assessment comments

Sources of information	
Basic	- F. Jensen (2007). Introduction to Computational Chemistry. Wiley
	- J. B. Foresman, A. Frisch, (1996). Exploring Chemistry with Electronic Structure Methods. Gaussian Inc.
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