



Teaching Guide				
Identifying Data				2015/16
Subject (*)	Estruturas Oceanicas	Code	730112616	
Study programme	Enxeñeiro Naval e Océanico			
Descriptors				
Cycle	Period	Year	Type	Credits
First and Second Cycle	1st four-month period	Fourth-Fifth	Optativa	4.5
Language	Spanish			
Teaching method	Face-to-face			
Prerequisites				
Department	Enxeñaría Naval e Océanica			
Coordinador	Mendez Diaz, Abel	E-mail	abel.mendez@udc.es	
Lecturers	Mendez Diaz, Abel	E-mail	abel.mendez@udc.es	
Web				
General description	ESTUDO DAS OLAS, CORRENTES E VENTO, CONSIDERANDO A SUA HIDRODINAMICA E CARGAS IMPOSTAS EN BUQUES E ARTEFACTOS OCEANICOS, QUE SON MOTIVO DO COMPORTAMENTO E CARGAS DINAMICAS			

Study programme competences / results	
Code	Study programme competences / results

Learning outcomes			
Learning outcomes			Study programme competences / results
ESTUDO DAS OLAS, CORRENTES E VENTO, CONSIDERANDO A SUA HIDRODINAMICA E CARGAS QUE EXERCEN SOBRE OS BUQUES E ARTEFACTOS OCEANICOS			A2 A3 A7
			B2 B4 B5

Contents	
Topic	Sub-topic
<ul style="list-style-type: none"> - Oceanografía física - Os factores ambientais na concepción e deseño de instalacións oceánicas - Teoría de olas: Ecuacións matemáticas de parámetros de ola (Olas de Stokes e Cnoidales) - Modelización do estado de la mar: espectros matemáticos e estadísticos - Técnicas de predicción da altura de ola - Forzas producidas polas olas (Fórmula de Morrison, Froude-Krylov e Difracción tridimensional) - Forzas producidas polo vento e as correntes - Estudo dinámico das estruturas oceánicas. Modelos globais. Estructuras de gravidade. Elementos finitos. 	N/A

Planning				
Methodologies / tests	Competencies / Results	Teaching hours (in-person & virtual)	Student?s personal work hours	Total hours
Objective test	A3 A7	4	20	24
Guest lecture / keynote speech	A2 A3 A7 B2 B4 B5	20	20	40
Problem solving	A7	18	16	34



Personalized attention		2	0	2
(*)The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.				

Methodologies	
Methodologies	Description
Objective test	Proba escrita utilizada para a avaliación da aprendizaxe, cuxo trazo distintivo é a posibilidade de determinar se as respostas dadas son ou non correctas. A proba ten 2 partes: proba teórica e resolución de problemas
Guest lecture / keynote speech	Exposición oral complementada co uso de medios audiovisuais e a introdución de algunhas preguntas dirixidas aos estudantes, coa finalidade de transmitir coñecementos e facilitar a aprendizaxe
Problem solving	Proba escrita utilizada para a avaliación da aprendizaxe, cuxo trazo distintivo é a posibilidade de determinar se as respostas dadas son ou non correctas. A proba ten 2 partes: proba teórica e resolución de problemas

Personalized attention	
Methodologies	Description
Problem solving	A resolución de problemas pode motivar o plantexamento de dúbidas polo alumno

Assessment			
Methodologies	Competencies / Results	Description	Qualification
Objective test	A3 A7	Exame escrito que cubre toda a asignatura. Parte teórica e parte problemas. E necesario superar ambas partes para aprobar	100
Others			

Assessment comments

Sources of information	
Basic	<ul style="list-style-type: none"> - Myers, Holm and McAllister. (1969). Handbook for ocean and underwater engineering. SNAME - S.K. Chakrabarti (1987). Hydrodynamics of Offshore Structures. WIT Press (UK) - J.Harvey &&&&&&& J.Adamchak. (1969). Ocean Engineering Structures.. Massachusetts Institute of Technology. - Charles I. Bretschneider. (1969). Topics in Ocean Engineering.. Gulf - Various (). Principles of Naval Architecture.. EPS Ferrol - F.J.Del Moral (2000). Apuntes de Estructuras Oceánicas. EPS Ferrol - Abel Méndez (2002). Apuntes de Oceanografía física. EPS Ferrol
Complementary	

Recommendations
Subjects that it is recommended to have taken before
Subjects that are recommended to be taken simultaneously
Subjects that continue the syllabus
Dinámica de artefactos oceánicos/730496009
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.