



Teaching Guide

Identifying Data					2016/17
Subject (*)	Estruturas Oceanicas	Code	730112616		
Study programme	Enxeñeiro Naval e Oceánico				
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 Oceánica				
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

Code	Study programme competences

Learning outcomes

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



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