



Teaching Guide				
Identifying Data				2023/24
Subject (*)	Integral Process of the Ship Project	Code	730496201	
Study programme	Mestrado Universitario en Enxeñaría Naval e Oceánica (plan 2018)			
Descriptors				
Cycle	Period	Year	Type	Credits
Official Master's Degree	1st four-month period	First	Obligatory	6
Language	Spanish			
Teaching method	Face-to-face			
Prerequisites				
Department	Enxeñaría Naval e IndustrialEnxeñaría Naval e Oceánica			
Coordinador	Álvarez García, Ana	E-mail	ana.alvarez1@udc.es	
Lecturers	Álvarez García, Ana Puente Varela, Basilio	E-mail	ana.alvarez1@udc.es basilio.puente@udc.es	
Web				
General description	The subject will analyze the application of specific classification levels and specific regulations to the ship's project. Construction markets, ship repair and construction strategy.			

Study programme competences / results	
Code	Study programme competences / results
A2	A01 - Capacidade para proxectar buques axeitados ás necesidades do transporte marítimo de persoas e mercadorías, e ás da defensa e seguridade marítimas.
A4	A03 - Coñecemento da dinámica do buque e das estruturas navais, e capacidade para realizar análise de optimización da estrutura da integración dos sistemas a bordo, e do comportamento do buque no mar e da súa manobrabilidade.
A6	A05 - Coñecemento dos mercados da construción e reparación de buques e dos seus aspectos legais e económicos, para a súa aplicación aos correspondentes contratos e especificacións.
A7	A06 - Capacidade para definir a estratexia construtiva dos buques e para planificar e controlar o seu desenvolvemento.
B1	CB06 Posuír e comprender coñecementos que acheguen unha base ou oportunidade de ser orixinais no desenvolvemento e/ou aplicación de ideas, a miúdo nun contexto de investigación
B2	CB07 Que os estudantes saiban aplicar os coñecementos adquiridos e a súa capacidade de resolución de problemas en ámbitos novos ou pouco coñecidos dentro de contextos máis amplos (ou multidisciplinares) relacionados coa súa área de estudo
B3	CB08 Que os estudantes sexan capaces de integrar coñecementos e enfrontarse á complexidade de formular xuízos a partir dunha información que, sendo incompleta ou limitada, inclúa reflexións sobre as responsabilidades sociais e éticas vinculadas á aplicación dos seus coñecementos e xuízos
B4	CB09 Que os estudantes saiban comunicar as súas conclusións e os coñecementos e razóns últimas que as sustentan a públicos especializados e non especializados dun modo claro e sen ambigüidades.
B5	CB10 Que os estudantes posúan as habilidades de aprendizaxe que lles permitan continuar estudando dun modo que haberá de ser en boa medida autodirixido ou autónomo.
B6	G01 Capacidade para resolver problemas complexos e para tomar decisións con responsabilidade sobre a base dos coñecementos científicos e tecnolóxicos adquiridos en materias básicas e tecnolóxicas aplicables na enxeñaría naval e oceánica, e en métodos de xestión.
B8	G03 Capacidade para proxectar buques e embarcacións de todo tipo.
B11	G06 Capacidade para realizar investigación, desenvolvemento e innovación en produtos, procesos e métodos navais e oceánicos.
B14	G09 Capacidade para redactar especificacións que cumpran co establecido nos contratos, os regulamentos e as normas de ámbito naval e industrial.
B18	G13 Capacidade para desenvolver a enxeñaría necesaria nas operacións de salvamento e rescate e no deseño e utilización dos medios requiridos.
B20	G15 Capacidade para organizar e dirixir grupos de traballo multidisciplinares nunha contorna multilingüe, e de xerar informes para a transmisión de coñecementos e resultados.



C1	Utilizar as ferramentas básicas das tecnoloxías da información e as comunicacións (TIC) necesarias para o exercicio da súa profesión e para a aprendizaxe ao longo da súa vida.
C2	C1 Capacidade pra desenrolar a actividade profesional nun entorno multilingue
C5	ABET (c) An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
C7	ABET (e) An ability to identify, formulate, and solve engineering problems.
C8	ABET (f) An understanding of professional and ethical responsibility.
C11	ABET (i) A recognition of the need for, and an ability to engage in life-long learning.
C12	ABET (j) A knowledge of contemporary issues.
C13	ABET (k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Learning outcomes			
Learning outcomes	Study programme competences / results		
Definition and planning of Constructive Strategy.	AJ6	BC1 BC2 BC3 BC4 BC5 BJ1 BJ15	CC2
Application and integration of technicians and calculations in the field of the naval architecture, compartmentalized, static and dynamics of the fuselage stability in intact state and after failures.	AJ1 AJ3 AJ5 AJ6	BC1 BC2 BC3 BC4 BC5 BJ1 BJ3 BJ6 BJ9 BJ13 BJ15	CC1 CC2 CC5 CC7 CC8 CC11 CC12 CC13
Markets of the Construction and Repair of Fuselages.	AJ5	BC1 BC2 BC3 BC4 BC5 BJ1 BJ3 BJ15	CC1 CC2



Reglamentación Specific to fill and interrelationship of all the naval technological components installed on board and applied to the development of the project of the fuselaje.	AJ1	BC1	CC1
	AJ3	BC2	CC2
	AJ5	BC3	CC5
	AJ6	BC4	CC7
		BC5	CC8
		BJ1	CC11
		BJ3	CC12
		BJ6	CC13
		BJ9	
		BJ13	
		BJ15	

Contents	
Topic	Sub-topic
Definition and planning of Construction Strategy.	
Application and integration of techniques and calculations in the field of naval architecture, compartmentalized, static and dynamic vessel stability in intact state and after breakdowns.	
Ship Construction and Repair Markets.	
Specific regulation to complete and interrelation of all the naval technological components installed on board and applied to the development of the ship Project.	

Planning				
Methodologies / tests	Competencies / Results	Teaching hours (in-person & virtual)	Student?s personal work hours	Total hours
Guest lecture / keynote speech	A2 A4 A6 A7 B1 B2 B3 B4 B5 B6 B8 B11 B14 B18 B20 C1 C2 C5 C8 C11 C7 C12 C13	35	0	35
Problem solving	A2 A4 A6 A7 B1 B2 B3 B4 B5 B6 B8 B11 B14 B18 B20 C1 C2 C5 C8 C11 C7 C12 C13	10	0	10
Case study	A2 A4 A6 A7 B1 B2 B3 B4 B5 B6 B8 B11 B14 B18 B20 C1 C2 C5 C8 C11 C7 C12 C13	7	45	52
Supervised projects	A2 A4 A6 A7 B1 B2 B3 B4 B5 B6 B8 B11 B14 B18 B20 C1 C2 C5 C8 C11 C7 C12 C13	7	45	52
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
Guest lecture / keynote speech	In this activity, the contents are worked on in a theoretical framework and reinforced through the development, in a guided manner in the classroom, of tutored work.
Problem solving	This methodology is included in the tutored work. A group work will be carried out for each subject in the programme. In some subjects, the work may contain several parts. The steps to be followed are: presentation of the topic, classroom sessions for guided follow-up, autonomous work and presentation in the classroom.
Case study	This methodology is included in the tutored work. A group work will be carried out for each subject in the programme. In some subjects, the work may contain several parts. The steps to be followed are: presentation of the topic, classroom sessions for guided follow-up, autonomous work and presentation in the classroom.
Supervised projects	A group work will be carried out for each topic of the programme. In some subjects the work may contain several parts. The steps to be followed are: presentation of the topic, classroom sessions for guided follow-up, autonomous work and presentation in the classroom.

Personalized attention	
Methodologies	Description
Supervised projects Problem solving	<p>In the classroom, during the hours set aside for the subject, students' work will be monitored in person and any doubts will be resolved. This implies an obligatory classroom participation for the students</p> <p>Even though what is indicated below corresponds to the criteria of behavior and attitude towards the issues raised by the professors in charge of this teaching during all the years in which we have taught these courses, by legal imperative we are obliged to specify in particular the following agreement, with the Regulations that regulate the regime of dedication to the study and permanence and the progression of undergraduate and master's degree students in the UDC (articles 6.b) and 7.5), is included in the guide teacher WHAT IS accepted the dispensation in this matter and in this case the specific personalized attention measures (work dynamics) that will be developed with this student body for the study of the subject will be the same as those established for the rest of the students.</p>

Assessment			
Methodologies	Competencies / Results	Description	Qualification
Supervised projects	A2 A4 A6 A7 B1 B2 B3 B4 B5 B6 B8 B11 B14 B18 B20 C1 C2 C5 C8 C11 C7 C12 C13	<p>In order to pass the subject, students must have passed all the proposed assignments and must participate in the classroom in the guided monitoring of the assignments.</p> <p>The following will be assessed:</p> <ul style="list-style-type: none"> - General approach 20%. - Solutions presented 30%. - Proposed innovations 30%. - Defence and presentation 20%. 	100

Assessment comments



1st Call: continuous assessment will be followed. In order to pass the subject, students must participate in the classroom in the guided monitoring of all the proposed activities. Students who do not follow the continuous assessment may opt for a mixed test that will have a grade of 100%.

2nd Call: the mixed test will have a 100%.

Early call (December): the mixed test will have a 100%.

For students with academic dispensation and part-time students, the tests will be the same as those established for the rest of the students. In the second opportunity and early call in December they will have to take a mixed test with a 100%.

"The fraudulent performance of the tests or assessment activities will directly imply the qualification of failing '0' in the subject in the corresponding call, thus invalidating any qualification obtained in all the continuous assessment activities for any call".

Sources of information

Basic	- Det Norske Veritas. (2008). Classification of offshore units DNV offshore codes. Hovik : Det Norske Veritas Classification - M.G. Stavitsky (1983). Fire fighting aboard ships. Houston [etc] : Gulf Pulishing Company, co
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

Even though what is indicated below correspondsto the criteria of behaviour and attitude towards the issues raised by the professors in charge of this teaching during all the years in which we have taught these courses, by legal imperative we are obliged to specify specifically, the following: "To help achieve a sustained immediate environment and meet the objective of action number 5:" Healthy andenvironmental and social teaching and research "of the" Green Campus Ferrol Action Plan ": The delivery of the documentary works that are made in this matter:? It will be done through virtual campus, in digital format without the need to print them ? If it is necessary to make them on paper: - Plastics will not be used - Double-sided prints will bemade. - Recycled paper will be used. - Printing of drafts will beavoided.Further: ? A sustainable use of resources and the prevention of negative impacts on the natural environment must be made. ? The importance of ethical principles related to the values of sustainability in personal and professional behaviours mustbe taken into account. ? Genderperspective is incorporated into the teaching of this subject (non-sexistlanguage will be used, bibliography of authors of both sexes will be used,intervention in class of students will be encouraged ...). ? Work will be done to identify and modifyprejudices and sexist attitudes, and the environment will be influenced tomodify them and promote values of respect and equality. ? Discrimination situations must bedetected and actions and measures will be proposed to correct them.? The full integration of students who, for physical,sensory, psychological or socio-cultural reasons, have difficulties in gainingadequate, equal and beneficial access to university life will be facilitated.

(*)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.