



Teaching Guide

Identifying Data					2015/16
Subject (*)	Shipbuilding and ship propulsion		Code	730G05009	
Study programme	Grao en Enxeñaría Naval e Oceánica				
Descriptors					
Cycle	Period	Year	Type	Credits	
Graduate	1st four-month period	First	Obligatoria	6	
Language	Spanish				
Teaching method	Face-to-face				
Prerequisites					
Department	Enxeñaría Naval e Oceánica				
Coordinador	Piñon Quiñonero, Manuel	E-mail	manuel.pinon@udc.es		
Lecturers	Piñon Quiñonero, Manuel	E-mail	manuel.pinon@udc.es		
Web					
General description	Esta materia, de primeiro curso de carreira, introduce ao alumno no estudo da construción naval, proporcionándolle un primeiro encontro coas materias que serán obxecto de estudo en profundidade nos próximos cursos. O temario da materia abarca aspectos da construción do buque, estrutura, propulsión, navegación, maquinaria auxiliar, equipos, servizos do buque, etc.				

Study programme competences

Code	Study programme competences
A13	Knowledge of the mechanism and of the components of you hatch
A15	Knowledge of the characteristics of the systems of naval propulsion.
A20	Knowledge of the characteristics of the naval structural materials and of the criteria for its selection.
A21	Knowledge of the procedures and systems that are used for the control of the sea corrosion.
A29	Knowledge of the processes of ship building
A30	Knowledge of the bases of the maritime traffic for its application to the distribution of the spaces of the ship.
A31	Knowledge of the specific materials for machines, equipment and naval systems and of the criteria for its selection.
A32	Knowledge of the sea diesel engines, turbines of gas and plants of steam.
A33	Knowledge of the equipment and naval auxiliary systems.
A34	Knowledge of the electrical machines and of the naval electrical systems
A40	Knowledge of the bases of the maritime traffic for its application to the selection and assembling of the means of load and discharge of the ship.
B1	That the students proved to have and to understand knowledge in an area of study what part of the base of the secondary education, and itself tends to find to a level that, although it leans in advanced text books, it includes also some aspects that knowledge implicates proceeding from the vanguard of its field of study
B2	That the students know how to apply its knowledge to its work or vocation in a professional way and possess the competences that tend to prove itself by the elaboration and defense of arguments and the resolution of problems in its area of study
B3	That the students have the ability to bring together and to interpret relevant data (normally in its area of study) to emit judgments that include a reflection on relevant subjects of social, scientific or ethical kind
B4	That the students can transmit information, ideas, problems and solutions to a public as much specialized as not specialized
B5	That the students developed those skills of learning necessary to start subsequent studies with a high degree of autonomy
B6	Be able to carrying out a critical analysis, evaluation and synthesis of new and complex ideas.
C1	Using the basic tools of the technologies of the information and the communications (TIC) necessary for the exercise of its profession and for the learning throughout its life.
C2	Coming across for the exercise of a, cultivated open citizenship, awkward, democratic and supportive criticism, capable of analyzing the reality, diagnosing problems, formulating and implanting solutions based on the knowledge and orientated to the common good.
C4	Recognizing critically the knowledge, the technology and the available information to solve the problems that they must face.
C5	Assuming the importance of the learning as professional and as citizen throughout the life.



C6	Recognizing the importance that has the research, the innovation and the technological development in the socioeconomic and cultural advance of the society.
C7	Capacidade de traballar nun ámbito multilingüe e multidisciplinar.

Learning outcomes			
Learning outcomes	Study programme competences		
Conocer e manexar correctamente a nomenclatura de las partes do buque, sus equipos, maquinaria y en general de toda a tecnoloxía utilizada para su construción.	A13 A15 A20 A21 A31 A32 A33 A34		
Conocer os distintos elementos del buque, su utilización e su función a bordo	A13 A15 A20 A21 A31 A32 A33 A34 A40		
Conocer as tecnicas de construción aplicadas a construción naval	A20 A21 A29 A30	B2 B4 B6	C2 C5 C7
Aprender a localizar información relevante sobre un particular nas fontes de información disponibles sobre construción naval.	A29	B1 B2 B3 B4 B5 B6	C1 C2 C4 C5 C7
Conocer os requerimientos técnicos os que se ve sometido o buque durante su construción y explotación, así como as soluciones que a ingeniería proporciona a dichos requerimientos.	A13 A15 A20 A21 A29 A31 A32 A33 A34 A40	B1 B2 B3 B4 B6	C1 C2 C4 C5 C6 C7
Conocer la relevancia de la industria naval, en las economías de los países		B5	C6

Contents	
Topic	Sub-topic



1.- Generalidades	I.- a navegación II.- o buque III.- Astillero IV.- Arquitectura naval V.- O contrato de construción e entidades relacionadas con a industria naval.
2.- Estructura	VI.- Características de un buque VII.- Elementos estruturais de un buque VIII.- Compartimentos principais de un buque IX.- Equipo de amarre e fondeo X.- Equipo de carga e descarga XI.- Accesos de un buque XII.- Elementos de luz e ventilación de un buque XIII.- Habilitación
3.- Armamento	XIV.- Propulsión do buque XV.- Aparatos auxiliares XVI.- Equipos auxiliares a navegación XVII.- Aparato de goberno XVIII.- Equipo de salvamento e seguridade
4.- Outros	XIX.- Navegación a vela XX.- Buques de pesca XXI.- Embarcacións deportivas XXII.- Plataformas off-shore

Planning				
Methodologies / tests	Competencies	Ordinary class hours	Student's personal work hours	Total hours
Guest lecture / keynote speech	A13 A15 A20 A21 A29 A30 A31 A32 A33 A34 A40 B2 B6 C2 C7	30	45	75
Workshop	A13 A15 A20 A21 A29 A30 A31 A32 A33 A34 A40 C7	25	20	45
Oral presentation	A40 A34 A33 A32 A31 A30 A29 A21 A20 A15 A13 B1 B2 B3 B4 B5 B6 C1 C2 C4 C5 C6 C7	5	20	25
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



Guest lecture / keynote speech	<p>clase de los fundamentos de construcción naval.</p> <p>Medios :</p> <ul style="list-style-type: none"> - pizarra - transparencias - proyecciones, - videos - películas - etc <p>Exposición oral complementada con el uso de medios audiovisuales y un cierto debate entre profesor y estudiantes para transmitir de la mejor manera posible los conocimientos del profesor al alumno. Previamente se les facilita a los alumnos copia del tema que se va a presentar por medios audiovisuales, para facilitarles el seguimiento de las explicaciones. Aunque no es la mejor de las metodologías y no goza de buena prensa, la lección magistral sigue siendo la forma más eficiente de transmitir de forma rápida grandes caudales de información en el poco tiempo del que se dispone para la impartición de la materia.</p>
Workshop	<p>Visitas a :</p> <p>Astilleros</p> <p>Talleres de construcción naval</p> <p>Museo monográficos de construcción naval</p>
Oral presentation	<p>Presentación de trabajos sobre a asignatura realizados por los alumnos tutelados.</p> <p>Los alumnos desde el primer día se ven obligados a trabajar en equipo, estructurando os temas expuestos en as lecciones magistrales, para al final presentar un estudio dos mismos, o lo que es lo mismo son responsables de sus propios apuntes</p>

Personalized attention

Methodologies	Description
Oral presentation Guest lecture / keynote speech Workshop	<p>A atención personalizada artículase a través das tutorías. O profesor está dispoñible para atender ao alumno e solucionarlle todas as súas consultas relativas á materia dentro do horario de tutorías asignado polo centro. Trátase dunha actividade voluntaria e non avaliable. De todos os xeitos, ánimoase aos alumnos a facer uso dela tanto como estimen conveniente. O alumno en todo momento pode contar coa colaboración dos profesores, tanto de forma individual como en equipo.</p>

Assessment

Methodologies	Competencies	Description	Qualification
Guest lecture / keynote speech	A13 A15 A20 A21 A29 A30 A31 A32 A33 A34 A40 B2 B6 C2 C7	valorase o aprendizaje en esta tecnología (construcción naval)	100
Others			

Assessment comments

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Sources of information

Basic	<ul style="list-style-type: none"> - Victoria Meizoso, J (1995). Principios de ingeniería naval. Ferrol. Torculo - Afonso de Amorín Domínguez, M. (1997). Construcción naval I. Santiago, Tórculo, <p>
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Complementary	<ul style="list-style-type: none">- Fernández González, Francisco (). Construcción Naval I Nomenclatura y Tecnología. Departamento de Artes Gráficas ETSIN.- Delgado Lallemand, Luis (2006). De Proa a Popa. Equipos en el barco. Thonson- González López, Primitivo B. (). Técnicas de Construcción Naval. Universidad de La Coruña Como complementoComo complemento
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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

Es una asignatura de fundamentos

(*)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.