Teaching Guide				
Identifying Data				2017/18
Subject (*)	Collision Rules, Signals, Bouyage Systems and ISM Code		Code	631G01303
Study programme	Grao en Náutica e Transporte Marítimo			
Descriptors				
Cycle	Period	Year	Type	Credits
Graduate	1st four-month period	Third	Obligatoria	6
Language	English			
Teaching method	Face-to-face			
Prerequisites				
Department	Ciencias da Navegación e Enxeñaría MariñaEnxeñaría Naval e Industrial			
Coordinador	Río Romero, Joaquin Del	E-mail	joaquin.del.rio@udc.es	
Lecturers	Campa Portela, Rosa Mary de la López López, María Natividad Río Romero, Joaquin Del	E-mail	rosa.mary.campa@udc.es natividad.lopezl@udc.es joaquin.del.rio@udc.es	
Web				
General description				

Study programme competences	
Code	Study programme competences
A1	Controlar as boas prácticas de seguridade e saúde no traballo.
A11	Empregar o inglés, falado e escrito, aplicado á navegación e ao negocio marítimo.
A15	Realizar unha garda de navegación segura.
A16	Manter a seguridade da navegación utilizando o radar, a ARPA e os modernos sistemas de navegación para facilitar a toma de decisións.
A17	Adoptar as medidas axeitadas en casos de emerxencias.
A20	Transmitir e recibir información mediante todo tipo de sinais.
A29	Responder correctamente ás diferentes situacións de emerxencia.
A35	Organizar e dirixir a tripulación.
B2	Resolver problemas de xeito efectivo.
B4	Comunicarse de xeito efectivo nun ámbito de traballo.
B6	Traballar de forma colaboradora.
B11	Capacidade de adaptación a novas situacións.
B14	Capacidade de análise e síntese.
B16	Organizar, planificar e resolver problemas.
B18	Dominar a expresión e a comprensión de forma oral e escrita dun idioma estranxeiro.
B19	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.
B22	Valorar criticamente o coñecemento, a tecnoloxía e a información dispoñible para resolver os problemas cos que deben enfrontarse.
C6	Valorar criticamente o coñecemento, a tecnoloxía e a información dispoñible para resolver os problemas cos que deben enfrontarse.
C11	Que os estudantes sexan capaces de integrar coñecementos e enfrontarse á complexidade de formular xuízos a partires dunha información que, sendo incompleta ou limitada, inclúa reflexións sobre as responsabilidades sociais e éticas vencelladas á aplicación dos seus coñecementos e xuízos
C12	Que os estudantes saiban comunicar as suas conclusións e os coñecementos e razóns últimas que as sustentan a públicos especializados e non especializados dun xeito claro e sin ambigüidades

Learning outcomes	
Learning outcomes	Study programme competences

Realizar eficazmente las maniobras del buque en navegación. Ser capaz de analizar la información de los aparatos del puente para una mejor toma de decisiones	A11	B2 B4 B11 B14 B16 B18 B19 B22	C6 C11 C12
Conocer el Reglamento internacional para prevenir los abordajes en la mar, el sistema de Balizamiento IALA, el Codigo internacional de señales y el Codigo ISM.	A17 A29 A35	B11 B14 B19	C6
Evaluar situaciones de peligro, aplicar las reglas de navegación.	A11	B6 B14	C6
Mejorar la gestión de la seguridad del buque, elaborar las listas de comprobación del sistema de gestión, elaborar informes de seguridad, accidentes etc	A1 A17 A29 A35	B2 B4	C6
Realizar unha garda de navegación segura	A15		
Manter a seguridade da navegación utilizando o radar, a ARPA e os modernos sistemas de navegación para facilitar a toma de decisións.	A16		
Transmitir e recibir información mediante todo tipo de sinais	A20		

Contents	
Topic	**Sub-topic**
Introduction to Collision Regulations	Watchkeeping - Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972, as amended - Thorough knowledge of the Principles to be observed in keeping a navigational watch - The use of routeing in accordance with the General Provisions on Ships? Routeing - The use of information from navigational equipment for maintaining a safe navigational watch - Knowledge of blind pilotage techniques - The use of reporting in accordance with the General Principles for Ship Reporting Systems and with VTS procedures
COLREGS Part A - General Part B - Steering and Sailing Part C - Lights and Shapes Part D - Sound and Light signals Part E - Exemptions.	Part B: Section 1 - Conduct of vessels in any condition of visibility (Rules 4-10) Section II - Conduct of vessels in sight of one another (Rules 11-18) Section III - conduct of vessels in restricted visibility (Rule 19)
COLREGS Annex I - Positioning and technical details of lights and shapes. Annex II - Additional signals for fishing vessels fishing in close proximity. Annex III - Technical details of sounds signal appliances Annex IV - Distress signals, which lists the signals indicating distress and need of assistance.	Same

International Code of Signals The Morse Code International Flags and Pennants Single letter signals	Señalización visual - Capacidad para utilizar el Código Internacional de Señales -Capacidad para transmitir y recibir señales luminosas en Morse, señales de socorro SOS como se especifican en el anexo IV del Reglamento internacional para prevenir los abordajes, 1972, enmendado, y en el apéndice 1 del Código Internacional de Señales, y señales visuales de una sola letra, también especificadas en el Código Internacional de Señales
IALA MARITIME BUOYAGE SYSTEM Lateral Marks Region A Lateral Marks Region B Direction of Buoyage Cardinal Marks Isolated Danger Marks Safe Water Marks Special Marks Chart symbols and abbreviations	Types of Marks Colours of Marks Shape of Mark Topmarks Light colour and rhithm
INTERNATIONAL SAFETY MANAGEMENT CODE Unit 1: Introduction to IMO and ILO. Unit 2: Safety and security prevention and protection. ISM Code and ISPS Code. Unit 3: Ship safety responsibilities. Unit 4: ISM Code: definition, structure, safety policy, ship-owner communication, captain responsibilities. Unit 5: ISM Resources and personnel, human factors- human error. Unit 6: ISM Code: Preventive maintenance Unit 7: ISM Code: Procedures (operation, emergency, non-conformities, accident report and accident investigation) Unit 8: ISM Code: Company verification and certification.	same
The development and overcoming of these contents, together with those corresponding to other subjects that include the acquisition of specific competencies of the degree, guarantees the knowledge, comprehension and sufficiency of the competencies contained in Table AII / 2, of the STCW Convention, related to the level of management of chief mates of the Merchant Navy, on ships without gross tonnage limitation and Master up to a maximum of 3.000 GT.	Table A-II / 2 of the STCW Convention. Mandatory minimum requirements for certification of masters and chief mates on chief on ships of 500 gross tonnage or more.

Planning				
Methodologies / tests	Competencies	Ordinary class hours	Student?s personal work hours	Total hours
Supervised projects	A11 A17 A35 B4 B6 B14 B16 B18 B19 C6 C11	2	20	22
Case study	A29 B22	4	20	24
Directed discussion	B2	2	2	4
Oral presentation	C12	2	10	12
Completion exercises	A1 B11	1	1	2
Guest lecture / keynote speech	A11 B4 B18	40	40	80
Personalized attention		6	0	6

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

Methodologies	
Methodologies	**Description**
Supervised projects	Home work as required by teachers
Case study	Accident/incident reports review
Directed discussion	Accident/incident reports review on class discussion
Oral presentation	Class oral activities
Completion exercises	Final exam
Guest lecture / keynote speech	Teachers classes

Personalized attention	
Methodologies	**Description**
Guest lecture / keynote speech Supervised projects Directed discussion Oral presentation Case study Completion exercises	As per teachers instructions

Assessment			
Methodologies	**Competencies**	**Description**	**Qualification**
Supervised projects	A11 A17 A35 B4 B6 B14 B16 B18 B19 C6 C11	as per teachers instructions	20
Oral presentation	C12	same	20
Case study	A29 B22	same	20
Completion exercises	A1 B11	Final exam	40

Assessment comments
Oral and written activities throughout the course Final exams Los criterios de evaluación contemplados en el cuadro A-II/1 del Código STCW, y recogido en el Sistema de Garantía de Calidad, se tendrán en cuenta a la hora de diseñar y realizar la evaluación.

Sources of information	
Basic	- IMO (). INTERNATIONAL REGULATIONS FOR PREVENTING COLLISIONS AT SEA. - IALA (). MARITIME BUOYAGE SYSTEM. IALA - IMO (). INTERNATIONAL CODE OF SIGNALS. - IMO (). ISM CODE.
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

(*)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.