UNIVERSIDADE DA CORUÑA

Teaching Guide			
Identifying Data			2023/24
Subject (*)	Integral management of Safety and Security	Code	631510202
Study programme	Mestrado Universitario en Náutica e Transporte Marítimo		
Descriptors			

Cycle	Period	Year	Type	Credits
Official Master's Degree	1st four-month period	First	Obligatory	6

Language	SpanishGalicianEnglish			
Teaching method	Face-to-face			
Prerequisites				
Department	Ciencias da Navegación e Enxeñaría Mariña			
Coordinador	Louro Rodríguez, Julio	E-mail	julio.louro@udc.es	
Lecturers	Campa Portela, Rosa Mary de la	E-mail	rosa.mary.campa@udc.es	
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Web				
General description	The objetive of this subject is that the student purchase the necessary knowledges associated to the maritime safety for development of the profession. For this will study the methods of analysis of maritime accidents, will deepen in the mechanisms of search and rescue at sea, and will study in detail the rules about the management of the safety, the security and the quality in the maritime field.			

Study programme competences	
Code	Study programme competences
A4	Capacidade para coordinar as operacións de procura e salvamento.
A5	Capacidade para establecer os sistemas e procedementos do servizo de garda.
A9	Capacidade para analizar as medidas que procede adoptar en caso de emerxencia da navegación.
A16	Capacidade para vixiar e controlar o cumprimento das prescricións lexislativas e das medidas para garantir a seguridade da vida humana no mar, a protección marítima e a protección do medio mariño.
A17	Capacidade para manter a seguridade e protección do buque, da tripulación e os pasaxeiros, así como o bo estado de funcionamento dos sistemas de salvamento, de loita contra incendios e demais sistemas de seguridade.
A18	Capacidade para elaborar plans para continxencias de control de avarías, e actuar eficazmente en tales situacións.
A19	Capacidade para a utilización das cualidades de liderado e xestión.
A20	Capacidade para organizar e administrar a atención médica a bordo.
B4	Capacidade para comunicarse de forma efectiva nunha contorna de traballo.
B5	Capacidade para traballar de forma efectiva nunha contorna de traballo.
B9	Capacidade de análise e síntese.
B11	Capacidade para organizar, planificar e resolver problemas relativos ao departamento de navegación
B12	CB6 -Posuír e comprender coñecementos que aporten unha base ou oportunidade de ser orixinais no desenvolvemento e/ou aplicación de ideas, a miúdo nun contexto de investigación
B13	CB7-Que os estudantes saiban aplicar os coñecementos adquiridos e a súa capacidade de resolución de problemas en contornas novas ou pouco coñecidas dentro de contextos máis amplas (ou multidisciplinares) relacionados coa súa área de estudo
B14	CB8-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
B15	CB9-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
B16	CB10-Que os estudantes posúan as habilidades de aprendizaxe que lles permitan continuar estudando dun modo que haberá de ser en grande medida autodirixido ou autónomo.
C2	Capacidade para dominar a expresión e a comprensión de forma oral e escrita nun idioma estranxeiro

C3	Capacidade para 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
C10	C10-Capacidade para aplicar os coñecementos adquiridos e a súa capacidade de resolución de problemas en contornas novas ou pouco coñecidas dentro de contextos máis amplos (ou multidisciplinares) relacionados coa súa área de estudo
C11	C11-Capacidade para 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

Learning outcomes			
Learning outcomes	**Study programme competences**		
Ability to use basic information and communication technology tools (TIC), necessary for the exercise of their profession and for lifelong learning			CC3
Capacidade para aplicar os coñecementos adquiridos e a súa capacidade de resolución de problemas en contornas novas ou pouco coñecidas dentro de contextos máis amplas (ou multidisciplinares) relacionados coa súa área de estudo		BC13	
Ability to integrate knowledge and face the complexity of formulating judgments based on information that, being incomplete or limited, include reflections on the social and ethical responsibilities linked to the application of your knowledge and judgments		BC14	
Ability to communicate effectively in a work environment.		BC4	
Ability to work effectively in a work environment.		BC5	
Capacity for analysis and synthesis.		BC9	
Ability to organize, plan and solve problems related to the navigation department.		BC11	
Ability to coordinate search and rescue operations.	AJ4		
Ability to establish on duty service systems and procedures.	AJ5		
Ability to analyse the measures to be taken in the event of a navigation emergency	AJ9		
Ability to watch and control compliance with legislative requirements and measures to ensure the safety of human life at sea, maritime security and the protection of the marine environment.	AJ16		
Ability to maintain the safety and security of the ship, crew and passengers, as well as the good state of operation of rescue, firefighting and other safety systems.	AJ17		
Ability to develop contingency plans for fault control, and act effectively in such situations	AJ18		
Ability to organize and manage medical care on board.	AJ20		
Posuír e comprender coñecementos que aporten unha base ou oportunidade de ser orixinais no desenvolvemento e/ou aplicación de ideas, a miúdo nun contexto de investigación		BC12	
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		BC15	
Que os estudantes posúan as habilidades de aprendizaxe que lles permitan continuar estudando dun modo que haberá de ser en grande medida autodirixido ou autónomo.		BC16	
Capacidade para dominar a expresión e a comprensión de forma oral e escrita nun idioma estranxeiro			CC2
Capacidade para aplicar os coñecementos adquiridos e a súa capacidade de resolución de problemas en contornas novas ou pouco coñecidas dentro de contextos máis amplos (ou multidisciplinares) relacionados coa súa área de estudo			CC10
Capacidade para 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			CC11
Capacidade para a utilización das cualidades de liderado e xestión	AJ19		

Contents	
Topic	**Sub-topic**

Topic 1: Investigation of maritime accidents and indicents	1.1. Report and analysis of maritime accidents and casualties following the ISM code.
	1.2. Accident investigation in IMO legislation: The Code for the Investigation of Marine Casualties and Incidents as ammended.
	1.3. Methods and tools to maritime accidents and incidents investigation
Topic 2: Search and rescue. IAMSAR code	A through knowledge of the contents of the International Aeronautical and Maritime Search and Rescue (IAMSAR)Manual and ability to apply its procedures.
	1.1. Responsibility and obligation to render assistance. SAR Organization and coordination. Ship report systems. Airplanes report systems.
	1.2. Assitance rendering.
	1.3. Scene coordination
	1.4. On board emergencies
Topic 3: Management systems introduction	3.1.- Quality management
	3.2.- Environmental management
	3.3.- Labour health and safety management
	3.4.- Other management systems.
	3.5.- Management system framework
Topic 4: Peculiarities of the management in shipping companies.	4.1.- International Management Code for the safe operation of ships and for pollution prevention [International Safety Management (ISM) Code].
	4.2.- Pollution prevention management. MARPOL Convention.
	4.3.- Labour health and safety management (prevention of labour risks)
	4.4.- Staff management. International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978
	4.5.- Ship security management. International Ship and Port Facility Security. (ISPS) Code
Topic 5: Ship protection management	5.1. Current piracy threats and patterns
	5.2 IMO, and other organizations and their role
	5.3 Preparations prior transit through high risk áreas
	5.4 Threat recognition and response
	5.5 Management during and post incident
	5.6 Spanish State action against piracy and terrorism
	5.7 Maritime Cybersecurity
Topic 6: The shipping company measures against piracy	10.1. Piracy as psychosocial risk factor
	10.2. Humanitarian response. Assistance to victims and their families.
Topic 7: Other topics related to the management of safety, health, pollution prevention and maritime security.	7.1 Application of CollRegs at management level
	7.2 Control compliance with legislative requirements and measures to ensure safety of life at sea, security and the protection of the marine environment
	7.3 Maintenance of safety and maritime protection
	7.4 Develop emergency and damage control plans and handle emergency situations
	7.5 Management of medical care on board
Topic 8: Leadership and management	Knowledge of shipboard personnel management and training
	A knowledge of related international maritime conventions and recommendations, and national legislation

Planning				
Methodologies / tests	Competencies	Ordinary class hours	Student?s personal work hours	Total hours
Problem solving	A4 A9 A18 A20 B4 B11 B12 B13 C3 C10	10	10	20

Case study	A5 A9 A18 B5 B12 B13 B14 C11	10	10	20
Supervised projects	A18 B9 B13 B16 C2	1	30	31
Oral presentation	B4 B9 B15	1	4	5
Objective test	A9 A16 A17 B9 B14	2	0	2
Guest lecture / keynote speech	A4 A16 A19 B13 B14	34	34	68
Personalized attention		4	0	4

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

Methodologies	
Methodologies	**Description**
Problem solving	Individual practical work in the classroom, which may require the use of ICT and/or prior or subsequent self-study/work of the student
Case study	Practical group work in the classroom, which may require prior or subsequent self-study/work of the student.
Supervised projects	Self-study/work that will require general classroom guidance and personalized tutoring.
Oral presentation	It will consist of the oral presentation in the classroom of the tutored work assigned to the student
Objective test	Exam in which the student will show the knowledge and skills acquired.
Guest lecture / keynote speech	Face-to-face theoretical classes, which may require the student's prior and/or subsequent self-study/work

Personalized attention	
Methodologies	**Description**
Supervised projects	To the student, will be assigned one or more tutored works that will be exhibited in the classroom according to the calendar and the contents of the subject. For the realization of these works the student will have the advice of the teacher through personalized tutorials. Regarding the "Students with part-time dedication and academic attendance waiver" the Teacher makes available to the student the updated notes of the Subject in reprography room/Moodle, does not require class attendance for evaluation on both occasions in January and July and with regard to the Professor's tutoring, not only will you be willing to resolve the doubts presented to these types of students in the hours established for this purpose by the Professor; but also in any other where you are in the office and the other activities you are developing allow it. As regards the content of the objective test on both occasions, this will be the one generally established in the description of it. Students with part-time enrollment and academic grant of attendance exemption, as established by the "NORMA QUE REGULA EL RÉGIMEN DE DEDICACIÓN AL ESTUDIO DE LOS ESTUDANTES DE GRADO Y MASTER EN LA UDC (Arts. 2.3; 3.b; 4.3 and 7.5) (05/04/2017) may take the mid-term exams, if any, without having to attend 80% of the face-to-face classes, as long as the professors are duly informed at the beginning of the course. Regardless of the foregoing, the professors may assign these students with different assignments/ problems throughout the course to be presented during tutorials, using the TEAMS system if appropriate in the teacher's opinion.

Assessment			
Methodologies	**Competencies**	**Description**	**Qualification**
Guest lecture / keynote speech	A4 A16 A19 B13 B14	Attendance and use of face-to-face classes will be evaluated by the teacher.	10
Problem solving	A4 A9 A18 A20 B4 B11 B12 B13 C3 C10	Attendance, participation and use of problem-solving classes will be positively evaluated by the teacher	10
Case study	A5 A9 A18 B5 B12 B13 B14 C11	Attendance, participation and use of case study classes will be positively evaluated by the teacher	10
Supervised projects	A18 B9 B13 B16 C2	Evaluation of the process of carrying out the tutored work and the final result of it.	20

| Oral presentation | B4 B9 B15 | Oral face-to-face test in which the student will present the results of the assigned tutored work/s. | 10 |
| Objective test | A9 A16 A17 B9 B14 | It will consist of a written face-to-face test in which the student will demonstrate the knowledge acquired. | 40 |

Assessment comments

This subject consist on three different and independent parts, each of them is going to be assessed in and independent way, and the final mark will be the average mark of these three parts. The assessment critieria reflected on table A-II/2 of the STCW Code, and also reflected in the Quality System, are taken into account to design and perform the assessment.

Students with

part-time enrollment and academic grant of attendance exemption,

the 10% of attendance will be distributed proportionally among the rest of the criteria.

The student not admitted to continuous evaluation will be evaluated in face-to-face test with a value of 100%.

Regarding the

sanctions applicable for the commission of serious misconduct, article 11 of

the Student Disciplinary Regulations of the University of A Coruña, approved by

the Governing Council on 02/27/2023, in June 2023 point b) was modified as

follows:

b) The

fraudulent completion of exams or assessment activities, once confirmed, will

result directly in a failing grade in the respective exam session: the student

will be graded as "fail" (numerical grade of 0) in the corresponding

academic year's exam session, whether the misconduct occurs in the first

opportunity or the second. In this regard, their grade will be modified in the

first opportunity's record, if necessary.

Sources of information

| Basic | Tráficos ilícitos, piratería y terrorismo en la mar. José Carlos Moreno Torres. Piratería y terrorismo en el mar. Sobrino Heredia, José Manuel. El código PBIP. Ricard Mari Sagarra. Actions to be taken to prevent acts of piracy and armed robbery. Model course 3.23. IMO 2011 Edition. Inteligencia y seguridad. Revista de análisis y prospectiva. Universidad Rey Juan Carlos. Reglamento (CE) No 725/2004 DEL PARLAMENTO EUROPEO Y DEL CONSEJO de 31 de marzo de 2004relativo a la mejora de la protección de los buques y las instalaciones portuarias. ANEXO II. ENMIENDAS AL ANEXO DEL CONVENIO. INTERNACIONAL PARA LA SEGURIDAD DE LA VIDA HUMANA EN EL MAR, 1974. ANEXO III CÓDIGO INTERNACIONAL PARA LA PROTECCIÓN DE LOS BUQUES Y DE LAS INSTALACIONES PORTUARIAS (CÓDIGO PBIP). OMI;Código Internacional de Gestión de la Seguridad (Código IGS) y Directrices revisadas para la implantación del Código IGS. Segunda edición. Londres: OMI. OMI; Código Internacional para la Protección de los Buques y de las Instalaciones Portuarias. Londres: OMI. OMI; Convenio Internacional sobre Normas de Formación, Titulación y Guardia para la Gente de Mar de 1978 en su forma enmendada en 1995 (STCW 95).Londres: OMI. Tercera edición (refundida). Londres: OMI. Cuarta edición (refundida). Londres: OMI. Normativa UE. Normas UNE-EN-ISO Modelo EFQM de Excelencia. Reglamento europeo EMAS. OHSAS 18001. Directrices relativas a los sistemas de gestión de la seguridad y la salud en el trabajo, ILO-OSH. La Ley 31/1995, de Prevención de Riesgos Laborales, y su normativa de desarrollo. Códogo IAMSAR Código para la investigacion de siniestros y sucesos marítimos Marine accident and incident investigation manual, OMI The field guide to human error investigations Manual práctico para la investigación de accidentes e incidentes laborales. Código IGS y directrices para su implantación. Edición de 2018. OMI |
| 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
?As stated in the different regulations of application for university teaching, the gender perspective must be incorporated in this matter (Non-sexist language will be used, bibliography of authors of both sexes will be used, te intervention in class of students will be encouraged.Work will be done to identify and modify prejudices and sexist attitudes and will influence the environment to modify them and promote values of respect and equality.Situations of discrimination based on gender should be detected and actions and measures proposed to correct them?.

(*)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.