



Teaching Guide				
Identifying Data				2023/24
Subject (*)	Rescue Technicians and Failures Control	Code	631510214	
Study programme	Mestrado Universitario en Náutica e Transporte Marítimo			
Descriptors				
Cycle	Period	Year	Type	Credits
Official Master's Degree	2nd four-month period	First	Optional	3
Language	SpanishGalician			
Teaching method	Face-to-face			
Prerequisites				
Department	Ciencias da Navegación e Enxeñaría Mariña			
Coordinador	Cao Feijóo, Genaro	E-mail	genaro.cao@udc.es	
Lecturers	Cao Feijóo, Genaro	E-mail	genaro.cao@udc.es	
Web				
General description	<p>This subject is divided into two general blocks. The main aim is to transfer to a future Masters's in Nautical and Maritime Transport several aspects related to maritime salvage (from a summary of the applicable regulations and their peculiarities, the action of the Captain before accidents and safety in action; going through the towing and use of aircraft to an approach to the industry and different ships of salvage) and some of the techniques used to carry it out.</p> <p>The other block will focus on the control of breakdowns on board. Its causes will be studied first and their effects too. Next, we will review compartmentalisation and its resistance and bilge. Finally, we will know certain techniques for plugging the case, patching pipes and propping.</p>			

Study programme competences / results	
Code	Study programme competences / results
A4	Capacidade para coordinar as operacións de procura e salvamento.
A7	Capacidade para manter a seguridade da navegación utilizando o SIVCE e os sistemas de navegación conexos para facilitar a toma de decisións.
A9	Capacidade para analizar as medidas que procede adoptar en caso de emerxencia da navegación.
A13	Capacidade para a avaliación das avarías e defectos notificados, nos espazos de carga, as tapas de escotilla e os tanques de lastre, e adoptar as medidas oportunas.
A16	Capacidade para vixiar e controlar o cumprimento das prescricións legislativas 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.
A21	Capacidade para identificar danos e defectos, elaborar informes e implantar medidas correctivas.
B2	Capacidade para resolver problemas de forma efectiva.
B5	Capacidade para traballar de forma efectiva nunha contorna de traballo.
B6	Capacidade de adaptación a novas situacións.
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
C2	Capacidade para dominar a expresión e a comprensión de forma oral e escrita nun idioma estranxeiro



C6	Capacidade para valorar criticamente o coñecemento, a tecnoloxía e a información dispoñible para resolver os problemas cos que deben enfrontarse.
C7	Capacidade para asumir como profesional e cidadán a importancia da aprendizaxe ao longo da 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 / results		
Adquirir os coñecementos necesarios para resolver situacións de emerxencia a bordo dos buques.	AJ4	BC2	CC2
	AJ7	BC5	CC6
	AJ9	BC6	CC7
	AJ13	BC9	CC10
	AJ16	BC11	CC11
	AJ17	BC12	
	AJ18	BC13	
	AJ19	BC14	
	AJ21		

Contents	
Topic	Sub-topic



<p>1. TÉCNICAS DE SALVAMENTO</p>	<p>NORMATIVA APLICÁBEL.</p> <p>ACTUACIÓN DO CAPITÁN, ARMADOR Y CAPITÁN DE PORTO ANTE SINISTROS.</p> <p>AUXILIO E SALVAMENTO.</p> <p>COMUNICACIÓNS.</p> <p>NOTIFICACIÓNS DE PERDAS.</p> <p>AVALIACIÓN DA SITUACIÓN.</p> <p>ACCIÓNS CANDO O BUQUE ESTÁ AVARIADO PERO NON SOBORDADO.</p> <p>REMOLQUE E REMOLQUE DE EMERXENCIA.</p> <p>TRANSBORDO DA CARGA.</p> <p>ACCIÓNS CANDO O BUQUE ESTÁ SOBORDADO.</p> <p>A INDUSTRIA DO SALVAMENTO.</p> <p>O PAPEL DO ITOPF NOS SINISTROS.</p> <p>O PAPEL DAS SOCIEDADES DE CLASIFICACIÓN.</p> <p>INSPECCIÓN E INVESTIGACIÓN DO SINIESTRO.</p> <p>A SEGURIDADE NO SALVAMENTO.</p> <p>MAREAS, CORRENTES Y CORRENTES DE MAREA.</p> <p>EQUIPO PORTÁTIL DE SALVAMENTO.</p> <p>MATERIAIS DE SALVAMENTO.</p> <p>ESTABILIDADE E HIDROSTÁTICA.</p> <p>TRABALLO CON BUZOS.</p> <p>PROCEDEMENTO DE CONTROL DE DANOS.</p> <p>BOIAS, APARELLOS, ÁNCORAS, CADEIAS, AMARRES.</p> <p>VARADAS, CÁLCULOS.</p> <p>O SALVADOR E A CARGA.</p> <p>EMPREGO DE AERONAVES.</p> <p>SALVAMENTO DE BUQUES TANQUE.</p> <p>CONTROL DA CONTAMINACIÓN.</p> <p>EMPREGO DE EXPLOSIVOS.</p> <p>OPERACIÓNS CON BARCOS FUNDIDOS, MÉTODOS DE REFLOTE.</p> <p>OPERACIÓNS DE LOCALIZACIÓN E RECUPERACIÓN.</p> <p>O BUQUE DE SALVAMENTO.</p>
<p>2. CONTROL DE AVARIÁS</p>	<p>2.1. CAUSAS E EFECTOS DAS AVARIÁS A BORDO.</p> <p>2.2. COMPARTIMENTACIÓN ESTANCA E RESISTENCIA.</p> <p>2.3. ACHIQUE DE COMPARTIMENTOS.</p> <p>2.4. TAPONALO CASCO.</p> <p>2.5. PARCHEO DE TUBARÍAS.</p> <p>2.6. APUNTALAR A BORDO.</p> <p>2.7. INSPECCIÓNS E PROBAS DE ESTANQUEIDADE.</p> <p>2.8. MATERIAIS DE CONTROL DE AVARIÁS.</p>
<p>O desenvolvemento e superación destes contidos, xunto cos correspondentes a outras materias que inclúan a adquisición de competencias específicas da titulación, garanten o coñecemento, comprensión e suficiencia das competencias recollidas no cadro A-II/2, do Convenio STCW, relacionadas co nivel de xestión de Primeiro Oficial de Ponte da Mariña Mercante, sen limitación de arqueado bruto e Capitán da Mariña Mercante ata o máximo de 3.000 GT.</p>	<p>Cadro A-II/2 del Convenio STCW.</p> <p>Especificación de las normas mínimas de competencia aplicables a Capitanes y primeros oficiales de puente de buques de arqueado bruto igual o superior a 500 GT.</p>



Methodologies / tests	Competencies / Results	Teaching hours (in-person & virtual)	Student?s personal work hours	Total hours
Supervised projects	A4 A7 A9 A13 A16 A17 A18 A19 A21 B2 B5 B6 B9 B11 B12 B13 B14 C2 C6 C7 C10 C11	4	16	20
Oral presentation	A7 A9 A13 A16 A17 A18 A19 A21 B2 B5 B6 B9 B11 B12 B13 B14 C2 C6 C7 C10 C11	2	7	9
Objective test	A7 A9 A13 A16 A17 A18 A19 A21	2	0	2
Guest lecture / keynote speech	A4 A7 A9 A13 A16 A17 A18 A19 A21 B2 B5 B6 B9 B11 B12 B13 B14 C2 C6 C7 C10 C11	14	28	42
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
Supervised projects	<p>Projects carried out by students (individuals and/or in groups) regarding two contents of the subject.</p> <p>Throughout the four-month period, one or several assignments will be provided around two contents of the agenda that must be based on the basic and complementary bibliography of the guide and with another selected by the teaching staff and/or student pole.</p> <p>Its realization will begin in the classroom and be completed through the autonomous work of the students, attending more indications provided through the differentiation of teachers. Through the exhibition in the classroom, the work done will be shared.</p>
Oral presentation	On the supervised projects
Objective test	Final exam
Guest lecture / keynote speech	<p>In the activity of the lecture guest, the contents that make up the theoretical framework will be worked on through oral presentation, guided by the use of presentations, audiovisual media and with the introduction of directed questions to the students with the purpose of favouring learning and the construction of knowledge.</p> <p>There will be an introductory general exposition of each one of the two different themes of which the program consists, indicating the aspects that the students should expand with their personal work, with the appropriate orientations bibliographic.</p>

Personalized attention	
Methodologies	Description



Guest lecture / keynote speech	The personalized differentiation described in relation to these methodologies is conceived as moments of work with the subject teachers.
Supervised projects	The way and the moment in which it will be developed will be indicated in each activity throughout the course according to the plan of matter work.
Oral presentation	
Objective test	Students with recognition of part-time dedication as established by the "RULE THAT REGULATES THE REGIME OF DEDICATION TO THE STUDY OF UNDERGRADUATE STUDENTS AT UDC (Articles 2.3; 3. b and 4.5)(05/29/2012). These students will develop their activity with the assistance and participation in the dynamics collected in Step 4 "Planning" and in the one that concerns us "Personalized lessons" described for the "Works supervised", through the workgroups that are formed in the subject. The activity will be carried out according to the observations of the evaluation regarding the flexibility of attendance participation and the requirements for overcoming the subject.

Assessment			
Methodologies	Competencies / Results	Description	Qualification
Guest lecture / keynote speech	A4 A7 A9 A13 A16 A17 A18 A19 A21 B2 B5 B6 B9 B11 B12 B13 B14 C2 C6 C7 C10 C11	The evaluation criteria referred to in Table A-II/2 of the STCW Code, and collected in the Quality Assurance System, will be taken into account when designing and carrying out the evaluation.	10
Supervised projects	A4 A7 A9 A13 A16 A17 A18 A19 A21 B2 B5 B6 B9 B11 B12 B13 B14 C2 C6 C7 C10 C11	To evaluate the projects it will be taken into account: - Structure: presentation, content organization, clear explanation and grammar. - Content: Understanding of basic ideas, conceptual mastery, use of the sources worked on in the treatment of content throughout the semester and relationships between them.	50
Oral presentation	A7 A9 A13 A16 A17 A18 A19 A21 B2 B5 B6 B9 B11 B12 B13 B14 C2 C6 C7 C10 C11	To evaluate the presentation, it will be evaluate: - Relevance and organization of the exposed contents. - Coordination of the presentation (reflecting collaborative work, not a sum of parts). - Level of understanding of the basic contents. - Clear explanation	20
Objective test	A7 A9 A13 A16 A17 A18 A19 A21	The evaluation criteria referred to in Table A-II/2 of the STCW Code, and collected in the Quality Assurance System, will be taken into account when designing and carrying out the evaluation.	20

Assessment comments
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## STCW Convention

2010: The evaluation criteria referred to in Table A-II/2 of the STCW Code, and collected in the Quality Assurance System, will be taken into account when designing and carrying out the evaluation.

To pass the

subject following the continuous evaluation it is necessary to pass each methodology. in-session lecture, at the same time as class attendance ( minimum of 80%), the student participation will be valued too.

Students who do

not follow the continuous assessment will always have the option of taking the objective test. Consequently, under this circumstance, this will have a value in the evaluation of 100%.

Students with

recognition of part-time dedication and the corresponding academic waiver that provide the assistance exemption, as established in the "RULE THAT REGULATES THE DEDICATION REGIME TO THE STUDY OF UNDERGRADUATE STUDENTS AT UDC (Articles 2.3; 3. b; 4.3; 6. b and 7.5) (05/04/2017) may carry out the partial tests, if any, without the need to attend 80% of the face-to-face classes, as long as the teacher is duly informed at the beginning of the course.

Notwithstanding the foregoing, the professor can entrust these students with different works (individual and/or in groups) throughout the course to be presented in the tutorial schedule in order to score in the continuous evaluation the proportional part of the value of the master session.

About the

sanctions applicable for de commission of serious offenses, article 11 of the Disciplinary Regulations of de student body of the University of A Coruña, approved by the Governing Council on 27/02/2023, point b) was amende in june 2023, to read:

b)

Qualification of suspense in the call in wich the fault it was committed, the student will be graded with ?fail? (numerical grade 0) in the corresponding call of the academic year, wheter the commission of the fault occurs at the first opportunity or at the second. For this, we will proceed to modify his qualification in the minutes of the first opportunity, if necessary.

## Sources of information

<b>Basic</b>	- Baptist, C.N.T. (1979). Salvage operations. Glasgow : Brown, Son & Ferguson - Cartagena : Centro de Instrucción de Seguridad Interior (C.I.S.I.) (1979). Manual de Seguridad Interior. Imprenta Zona Marítima del Mediterráneo - (). .
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**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.**