

		Teaching Guide		
	Identifyir	ig Data		2022/23
Subject (*)	Maritime accidents Investigation		Code	631G01512
Study programme	Grao en Náutica e Transporte Marítimo			
		Descriptors		
Cycle	Period	Year	Туре	Credits
Graduate	1st four-month period	Fourth	Optional	6
Language	Spanish			
Teaching method	Face-to-face	Face-to-face		
Prerequisites				
Department	Ciencias da Navegación e Enxeñ	aría Mariña		
Coordinador	Pacheco Martínez, Eliseo Antonio	D E-mail	eliseo.pacheco	@udc.es
Lecturers	Pacheco Martínez, Eliseo Antonio E-mail eliseo.pacheco@udc.es			@udc.es
Web				
General description	The objective of this subject is to	provide basic knowledge in the	e process of investigating	accidents and maritime inciden
	and to serve as an introductory se	cientific tool that allows profess	sional activity to be orient	ed towards the technical study o
	accidents at sea.			

	Study programme competences / results
Code	Study programme competences / results
A10	Redactar e interpretar documentación técnica e publicacións náuticas.
A40	Capacidad para identificar daños y defectos en la estructura del buque.
A41	Capacidad para identificar evidencias ante casos de accidentes y siniestros marítimos.
A42	Capacidad para recabar información objetiva en las entrevistas personales.
A44	Capacidad para redactar informes técnicos.
B2	Resolver problemas de xeito efectivo.
B3	Aplicar un pensamento crítico, lóxico e creativo.
B9	Capacidade para interpretar, seleccionar e valorar conceptos adquiridos noutras disciplinas do ámbito marítimo, mediante fundamentos
	físico-matemáticos.
B13	Comunicar por escrito e oralmente os coñecementos procedentes da linguaxe científica.
B14	Capacidade de análise e síntese.
B20	Desenvolverse para o exercicio dunha cidadanía aberta, culta, crítica, comprometida, democrática e solidaria, capaz de analizar a
	realidade, diagnosticar problemas, formular e implantar solucións baseadas no coñecemento e orientadas ao ben común.
B24	Valorar a importancia que ten a investigación, a innovación e o desenvolvemento tecnolóxico no avance socioeconómico e cultural da
	sociedade.
C4	Desenvolverse para o exercicio dunha cidadanía aberta, culta, crítica, comprometida, democrática e solidaria, capaz de analizar a
	realidade, diagnosticar problemas, formular e implantar solucións baseadas no coñecemento e orientadas ao ben común.
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 program		imme	
	con	npetenc	es /
		results	
Knowledge of national and international regulations applicable to maritime transport.		B20	C6
			C11



Application of national and international regulations in the investigation of claims and maritime events.			C4
			C6
Ability to identify damage to the structure of the ship.	A40		
Collection of evidence, personal interviews.	A41	B9	
	A42		
Write reports and compile statistics.	A10	B2	C12
	A44	B3	
		B13	
		B14	
		B24	

	Contents
Торіс	Sub-topic
1. Need to investigate accidents.	Difference with Judicial, Police or Expert Investigations.
	Other regulatory investigations.
2. Regulations related to the Investigation of Claims and	Maritime Events.
	International regulations.
	European regulations.
	Spanish regulations.
3. A.849 (20) and A.884(21). Code for the Investigation of	Code structure.
Marine Casualties and Incidents.	Definitions.
	Most important aspects.
	Human Factor.
4. National Organizations in charge of Investigations.	Most important organisms.
	International Forum of Marine Accident Investigators (MAIIF).
	Commission of Investigation of Accidents and Maritime Incidents (CIAIM). Spain.
5. Methodologies for conducting the Research.	A.1075 (28): Guidelines to assist investigators in the implementation of the Casualty
	Investigation Code.
	MAIIF Investigation Manual.
	MAIIF Investigators ?In-the-field Job Aid
	MAIIF Fire Investigation Manual.
	Other methodologies.
6. Writing the Report.	Phases in writing.
	Items to cover.
	Terminology.
	A.918 (22). SMCP
7. IMO Reporting.	IMO Global Integrated Shipping Information System (GISIS)
8. Statistics.	Examples of statistical databases.
9. Examples of Investigations.	Comments on Research Reports

Planning				
Methodologies / tests	Competencies /	Teaching hours	Student?s personal	Total hours
	Results	(in-person & virtual)	work hours	
Guest lecture / keynote speech	A10 B3 B9 B14 B20	30	30	60
	B24 C6			
Workshop	A10 A40 A41 A42	14	28	42
	A44 B2 B3 B9 B13			
	B14 B20 B24 C4			
Mixed objective/subjective test	B2 B9 B13 C12	6	0	6



Supervised projects	A10 A40 A41 A42	10	30	40
	A44 B2 B3 B9 B13			
	B14 B20 B24 C4 C6			
	C11			
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
Guest lecture /	Oral presentation (using audiovisual material and student interaction) designed to transmit knowledge and encourage learning.
keynote speech	Presentations of this type are variously referred to as ?expository method?, ?guest lectures? or ?keynote speeches?. (The
	term ?keynote? refers only to a type of speech delivered on special occasions, for which the lecture sets the tone or
	establishes the underlying theme; it is characterised by its distinctive content, structure and purpose, and relies almost
	exclusively on the spoken word to communicate its ideas.)
Workshop	Supervised learning process aimed at helping students to work independently in a range of contexts (academic and
	professional). Focused primarily on learning ?how to do things? and on encouraging students to become responsible for their
	own learning.
Mixed	Mixed test consisting of essay-type and objective test questions. Essay section consists of open (extended answer) questions;
objective/subjective	objective test may contain multiple-choice, ordering and sequencing, short answer, binary, completion and/or
test	multiple-matching questions.
Supervised projects	Methodology designed to promote students' autonomous learning, under the guidance of the teacher and in a variety of
	scenarios (academic and professional). It is primarily concerned with learning "how to do things". It is an option
	based on students taking responsibility for their own learning.
	This teaching system is based on two basic elements: independent learning by students and monitoring of this learning by the
	teacher-tutor.

	Personalized attention
Methodologies	Description
Workshop	Face-to-face.
Mixed	During tutorial hours, in accordance with current health regulations.
objective/subjective	
test	Teams.
Guest lecture /	Synchronous tutoring will only depend on the availability of the teacher.
keynote speech	
	Email.
	The teacher undertakes to respond as soon as possible to all questions sent asynchronously.
	For "Students with recognition of part-time dedication and academic dispensation of exemption from attendance" the teacher may offer the possibility of online tutoring.

Assessment			
Methodologies	Competencies / Description		Qualification
	Results		
Mixed	B2 B9 B13 C12	In order to be eligible for the Continuous Assessment, a minimum of 80% attendance	60
objective/subjective		must be justified.	
test			



Supervised projects	A10 A40 A41 A42	The supervised project may consist of the preparation of a draft of an investigation	40
	A44 B2 B3 B9 B13	report on a claim proposed to the student or the study of a claim based on the official	
	B14 B20 B24 C4 C6	report.	
	C11		
		In relation to the upervised project, the following will be assessed:	
		- The methodological adequacy with the requirements of the work.	
		- The accuracy of the calculations used.	
		- The depth of the content.	
		- Mastery of the concepts used.	
		- The correct use of terminology specific to the subject.	
		- The use of complementary and current documentary sources.	
		- The presentation and clarity of the exposition.	

Assessment comments

In order to be entitled to continuous assessment, a minimum of 80% of attendance to face-to-face classes will be required. The final grade of the Continuous Assessment will be 60% of Mixed Test and 40% of Tutored Work. Students with recognition of part-time dedication and academic dispensation of exemption from attendance (according to the "Norma que Regula o Réxime de Dedicación ao Estudo dos Estudantes de Grao na UDC?), will be able to take the Continuous Assessment without the need to attend 80% of the face-to-face classes. To this end, these students will duly inform the lecturers, at the beginning of the course, of this situation of academic dispensation and of their availability to attend classes. Apart from the Autonomous Work included in this Teaching Guide, the teachers will be able to give these students different assignments/problems throughout the course to be presented during tutorial hours. Students who do not follow the course (attendance less than 80%), or who do not pass the Continuous Assessment, will be able to sit the final exams in January and July. The assessment of these exams will consist of a Mixed Test that may include essay-type questions, open questions, multiple-choice, multiple-choice, ordering, short-answer, discrimination, completion and/or association questions. The contents of these mixed tests may cover any content of the subject. Such a Mixed Test will account for 100% of the qualification of that call. The evaluation criteria contemplated in Table A-II/1 of the STCW Code, and included in the Quality Assurance System, will be taken into account when designing and carrying out the evaluation.

	Sources of information
Basic	IMO Resolution A.849(20). IMO Resolution A.884(21). IMO Resolution A.1075(28). MAIIF Investigation
	Manual.MAIFF Investigators "In-the-field Job Aid".MAIIF Fire Investigation Manual.IMO Resolution A.849(20). IMO
	Resolution A.884(21). IMO Resolution A.1075(28). MAIIF Investigation Manual.MAIFF Investigators "In-the-field Job
	Aid".MAIIF Fire Investigation Manual.
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.