

## SUBJECT TEACHING GUIDE

G1050 - Navigation II

Degree in Nautical Engineering and Maritime Transport

Academic year 2020-2021

1. IDENTIFYING DATA					
Degree	Degree in Nautical Engineering and Maritime Transport			Type and Year	Compulsory. Year 2
Faculty	School of Maritime Engineering				
Discipline	Subject Area: Navegation				
Course unit title and code	G1050 - Navigation II				
Number of ECTS credits allocated	6	Term	Semester based (2)		
Web					
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. CIENCIAS Y TECNICAS DE LA NAVEGACION Y DE LA CONSTRUCCION NAVAL				
Name of lecturer	ANTONIO TRUEBA CORTES				
E-mail	antonio.trueba@unican.es				
Office	E.T.S. de Náutica. Planta: + 2. DESPACHO (264)				
Other lecturers	JOSE IVAN MARTINEZ GARCIA				

### 3.1 LEARNING OUTCOMES

- Astronomical navigation: Ability to determine the ship position using the celestial bodies.

### 4. OBJECTIVES

Celestial navigation. Ability to use celestial bodies to determine the ship's position.

## 6. COURSE ORGANIZATION

### CONTENTS

1	Cosmography and timing: Astronomy.- The solar system .- The Earth.- The moon.- Other celestial bodies of the solarsystem.- Eclipses and occultations.- Study of the time.- Chronometers.
2	Astronomical navigation. Nautical Almanac.

## 7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Theoretical exam at the end of May.	Written exam	No	Yes	50,00
Theoretical and practical exam.	Written exam	Yes	Yes	50,00
<b>TOTAL</b>				<b>100,00</b>
<b>Observations</b>				
The evaluation criteria of the competition are in line with the STCW Convention 2010. A remote assessment scenario may be presented, which would only be used if the competent health and educational authorities so indicate.				
<b>Observations for part-time students</b>				
Part-time students will agree with the teacher when to take the partial exams based on their availability.				

## 8. BIBLIOGRAPHY AND TEACHING MATERIALS

### BASIC

Moreu Curbera/ Martínez Jiménez: Astronomía y Navegación, Tomos I y II Librería San José, Vigo.  
 Almanaque Náutico, Armada Española, Servicio de Publicaciones.  
 Bowditch: American Practical Navigator, Defense Mapping Agency Hydrographic Center, Washington D.C., U.S.  
 Anuario de Mareas. Instituto Hidrográfico de la Marina. Armada Española, Servicio de Publicaciones.  
 Tablas de Navegación de Martínez Jiménez