SUBJECT TEACHING GUIDE

G311 - MATHEMATICS II

Degree in Maritime Engineering

Degree in Maritime Engineering and Naval Architecture

Academic year 2024-2025

1. IDENTIFYING DATA					
Degree	Degree in Maritime Engineering Degree in Maritime Engineering and Naval Architecture			Type and Year	Core. Year 1 Core. Year 1
Faculty	School of Maritime Engineering				
Discipline	Subject Area: Mathematics Basic Training Module				
Course unit title and code	G311 - MATHEMATICS II				
Number of ECTS credits allocated	6	Term		Semester based (2)	
Knowledge Field					
Web					
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. MATEMATICAS, ESTADISTICA Y COMPUTACION
Name of lecturer	TOMAS MARTIN HERNANDEZ
E-mail	tomas.martin@unican.es
Office	E.T.S. de Náutica. Planta: + 2. DESPACHO (234)
Other lecturers	

4. OBJECTIVES
Know and handle the basic topics of mathematical analysis necessary for the mathematical modeling of basic scientific and technical problems with implications to engineering

6. SUBJECT PROGRAM	
CONTENTS	
1	Real numbers and complex numbers. Absolute and relative error. First properties.
2	Analysis Calculus: Limits. Continuity. Differential calculus in one and two variables. Integration calculus in one and two variables. Differential equations with constant coefficients.
3	Astronomical positioning and loxodromic navigation.
4	Binomial distribution, Poison distribution and Normal distribution.

7. ASSESSMENT METHODS AND CRITERIA				
Description	Type	Final Eval.	Reassessn	%
First exam	Written exam	No	Yes	35,00
Questionnaires and class assignments	Activity evaluation with Virtual Media	No	No	29,00
Final exam	Written exam	Yes	Yes	36,00
TOTAL				100,00
Observations				
Observations for part-time students				
The part-time student enrolled will have facilities in conducting virtual activities.				

8. BIBLIOGRAPHY AND TEACHING MATERIALS
BASIC
T. Martín: “Fundamentos Matemáticos”. Ediciones TGD. Santander. 2016.