

SUBJECT TEACHING GUIDE

1181 - IMS Applied to the Planning and Control of Navigation

Master's Degree in Nautical Engineering and Maritime Management

Academic year 2024-2025

1. IDENTIFYING DATA					
Degree	Master's Degree in Nautical Engineering and Maritime Management			Type and Year	Compulsory. Year 1
Faculty	School of Maritime Engineering				
Discipline	Planning and Control of Navigation				
Course unit title and code	1181 - IMS Applied to the Planning and Control of Navigation				
Number of ECTS credits allocated	6	Term	Semester based (2)		
Web					
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Combination of face-to-face and online training

Department	DPTO. CIENCIAS Y TECNICAS DE LA NAVEGACION Y DE LA CONSTRUCCION NAVAL				
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3.1 LEARNING OUTCOMES
- Apply and analyze the design and implementation of safe travel plans.
- Apply and analyze the integrated systems of quality management, safety, environmental protection and occupational health for navigation control.
- Develop competencies grouped in the functions required for safe navigation of the ship, at the management level
- Maneuver and govern the vessel in all conditions in accordance with Rule A-II / 2 of the STCW Code 2010 as amended.
- Utilization of leadership and management qualities in accordance with Rule A-II / 2 of the STCW Code 2010 as amended

4. OBJECTIVES

The aim of the course is to train specialists in the organization of bridge teamwork of ships and in the management of navigation planning and control.
Voyage planning according to the general provisions on the organization of maritime traffic
Carry out notifications in accordance with the General Principles to which ship reporting systems and VTS procedures must comply
Acquire a thorough knowledge of the content, application and purpose of the International Regulations to Prevent Collisions, 1972, as amended, as well as the fundamental principles that must be observed in the performance of navigation guards
Know the interrelation and optimal use of all available nautical data to direct navigation.
Knowing how to execute the maneuvering and steering operations of the ship in all conditions.
Know how to organize the management and training of personnel on board ships
Know the relevant international maritime conventions and recommendations, as well as national legislation
Acquire the ability to apply task management and workload on board
Acquire the knowledge and ability to apply effective resource management
Acquire the knowledge and ability to apply decision-making techniques
Know how to elaborate, implement and supervise standardized operational procedures

6. SUBJECT PROGRAM

CONTENTS

1	Review of the basic principles to be observed in keeping the navigation watch. Familiarization with the ship bridge. Standard maneuvers. Effect of wind and currents on vessel maneuver. Use of tugs in port.
2	Leadership and direction. Attitude. Cultural perception. Meetings of information and analysis. Challenges and Responses.
3	Effects in shallow water. Bank effect, channel and interaction. Anchoring and mooring to monoboya.
4	Planning and organization of the bridge team. Authority. Duties of the Officer on watch. Management of bridge resources. Workload and stress.
5	Voyage planning and carrying out the trip in normal and emergency situations.

7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Continuous evaluation	Activity evaluation with Virtual Media	No	Yes	50,00
In person examination	Laboratory evaluation	No	No	50,00
TOTAL				100,00
Observations				
<p>In order to pass the subject, attendance to the practices, the completion of the assignments and the virtual support tests will be mandatory. All communications will be made through Moodle or the available platforms.</p> <p>A remote assessment scenario may be presented, which would only be resorted to if the competent health and educational authorities so indicate. The Non-attendance period (PNP) would remain the same. Note PNP = $0.5 * [(NMT + NMC) / 2]$ Average test score: $NMT = (Test\ score\ 1 + Test\ score\ 2 + Test\ score\ 3 + Test\ score\ 4 + Test\ score\ 5) / 5$ Average grade of the works: $NMC = (Comment\ Note\ 1 + Comment\ Note\ 2 + Comment\ Note\ 3) / 3$ The face-to-face period (PP) will be modified and adapted to non-face-to-face part as follows: it will be divided into three weeks: PP week 1: A task will be carried out (T1) due date to be determined PP week 2: A task will be carried out (T2) due date to be determined PP week 3: A task will be carried out (T3) due date to be determined. In order to pass the course, the presentation of all the PP works will be compulsory. As the assignment for week 1 is longer there is more time to be able to turn it in. The PP note will be accounted for as follows: Note PP = $0.5 * ((Note\ T1 + (Note\ T2 + Note\ T3) / 2) / 2)$ Final grade = PNP grade + PP grade</p>				
Observations for part-time students				
<p>Given the uncertain situation that the social distancing measures established by the health authorities do not allow the development of some teaching activity in the classroom for all enrolled students, a mixed teaching modality will be adopted that combines this classroom teaching with distance teaching. In the same way, tutoring may be replaced by remote tutoring using telematic means.</p>				

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC
Norma ISO 9001
Norma ISO 14001
Norma OHSAS 18001
International Safety Management Code de la IMO (Aprobado mediante la Resolución A741[18] y enmendado por el Maritime Safety Committee Res 104[73]).
Bridge Resources Management/Bridge Team Management Training, RTMSTARCENTER, Dania, Florida (EEUU)
Bridge Procedures Guide. International Chamber of Shipping, Fourth Edition. Londres 2007
Apuntes de Maniobra. Andrés Ortega Piris, Ediciones TGD. ISBN-978-84-96926-38-7. Santander 2009