



General Information		
Academic subject	Telecommunication	
Degree course	First Level	
Curriculum	"Scienze e Gestione Attività Marittime"	
ECTS credits	6	
Compulsory attendance	No	
Language	Italiano	

Subject teacher	Name Surname	Mail address	SSD
	GIUSEPPE	giuseppe.tropeano@uniba.it	ING/INF-03
	TROPEANO	beppe.marconi@tiscali.it	

ECTS credits details		
Basic teaching activities		

Class schedule	
Period	II SEMESTER
Year	2022/2023
Type of class	Lecture- workshops

Time management	
Hours	
In-class study hours	
Out-of-class study hours	

Academic calendar	
Class begins	
Class ends	

Syllabus	
Prerequisites/requirements	None
Expected learning outcomes (according to Dublin Descriptors) (it is recommended that they are congruent with the learning outcomes contained in A4a, A4b, A4c tables of the SUA-CdS)	Knowledge and understanding  Acquisition of the methodology necessary for the knowledge and understanding of the telecommunications topics indicated in the program;
	Applying knowledge and understanding
	The acquisition of the methodology necessary for the application of the knowledge and understanding of the telecommunications topics indicated in the program during the various operational activities that the learners will have to carry out, also through the analysis of the typical problems of Radiocommunication on board a Naval Unit.
	Making informed judgements and choices
	The acquisition and development of the ability to study critically the operational topics indicated in the teaching program, including through





the careful study of the most significant regulations and operating procedures relating to the individual subjects under study, including through teaching activities of a seminar type.

## Communicating knowledge and understanding

The acquisition of the ability to argue the topics of the program, so as to know how to present them with mastery and in a critical way in moments of sharing, discussion and discussion in the classroom, either individually or in groups.

## Capacities to continue learning

The acquisition of the methodology necessary for learning and the critical study of the most significant literature, existing on the subjects under study, and of the most innovative regulation.

## Contents

The course refers to the teaching of Telecommunications for the learning of the aspects of the discipline essential for the achievement of the overall educational objectives of the course of study. Specifically, the course aims to raise awareness of the phenomena related to telecommunications and systems that generally allow it to be implemented; to provide learners with the necessary basis for an easy use of the various communication systems that will be used at future employment destinations; to acquire, in particular, the skills for the use of Maritime Radiocommunication systems (GMDSS).

Particular attention is given to practical exercises, discussion, interpretation and critical analysis of the results of knowledge acquired theoretically. • Notes on the principles of Radiopropagation of radio waves in the atmosphere (Ionosphere, Stratosphere and Troposphere); • Example of a typical terrestrial, satellite, radio link; • Overview of Modulations used in Telecommunications; • Overview of Transmission Lines and Antennas; • Satellite communications; • Overview of the content of SOLAS Standards for GMDSS - Global Maritime Distress and Safety Systems; • The GMDSS system - Global Maritime Distress and Safety Systems, and its functions (for the Safeguarding of Human Life at Sea); • GMDSS subsystems: DSC, Cospas Sarsat, Inmarsat; AIS, VTS, SART, NAVTEX; • Systems for the dissemination of notices for navigation safety (MSI, NAVTEX); • Relief, Urgency and Safety procedures and radio frequencies; • Radiocommunication order of precedence; • Notes on the procedures of Search and Rescue at Sea with the help of helicopters and SAR Airplanes and notes on the Organization of the SAR - National and Search and Rescue; • Radioboys and COSPAS SARSAT system; • Hints on GADSS and Iridium System • INMARSAT within the GMDSS; • Typical Radio procedures in an emergency context; • Inspection visits for Radio Safety purposes (Radio Safety certificate); • IMC STCW procedures for issuing





	certificates for GMDSS stations.
Course program	
Bibliography	<ul> <li>Teacher's notes</li> <li>G.D.Lees and W.G.Williamson, Handbook for Marine Radio Communication, LLP London, 2004</li> <li>R.MORA, Il GMDSS, Bozzi Editore Genova, 1999</li> <li>Manuale Operativo: U.K. Hydrographic Office, ADMIRALTY List of Radio Signals – Global Maritime and Safety System (GMDSS),NP285,Vol.5 2015/16</li> </ul>
Notes	
Teaching methods	The course develops through frontal lessons related to the relevant aspects of the discipline, essential for achieving the specific and global training objectives of the course. Frontal teaching will be supported by seminars and telecommunications tutorials and will follow, where possible, an interaction with learners, through discussion groups on the e-learning platform or in the classroom
	During the lessons will be used various tools for the improvement of teaching such as, for example, Powerpoint presentations projected in the classroom, schemes, bibliographic references and anything else deemed useful for the improvement of teaching effectiveness.
Assessment methods (indicate at least	Written and Oral
the type written, oral, other)	
Evaluation criteria (Explain for each expected learning outcome what a student has to know, or is able to do, and how many levels of achievement there are).	The final exam related to teaching takes place in written and / or oral form; the relative evaluation is expressed with a score in thirtieths, with possible praise
	Further verification of the profit (interviews) are scheduled during the course. They are related to the topics covered in class and are organized in the form of questionnaires, characterized by open questions and / or multiple answers. They can be taken into account in the final evaluation.
	The criteria for the evaluation of the oral test take into account the correctness of the contents, the clarity of argument and the ability of critical analysis and re-elaboration
Further information	