General Information	
Academic subject	ORGANIC CHEMISTRY
Degree course	Sciences and Management of Maritime Activities
Curriculum	
ECTS credits	9
Compulsory attendance	No
Language	Italiano

Subject teacher	Name Surname	Mail address	SSD
	Filippo Perna	filippo.perna@uniba.it	Chim/06

ECTS credits details			
Basic teaching activities	72		

Class schedule	
Period	2° semester
Year	1°
Type of class	Lecture- workshops

Time management	
Hours	225
In-class study hours	72
Out-of-class study hours	153

Academic calendar	
Class begins	07/03/2022
Class ends	25/06/2022

Syllabus	
Prerequisites/requirements	General and Inorganic Chemistry
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 basic theoretical principles to understand the structure and reactivity of the most common classes of organic compounds. *Applying knowledge and understanding* Acquisition of ability to analyze, apply and discuss acquired knowledge to predict the structure of simple molecules and the possible reactions of organic compounds. *Making informed judgements and choices* Acquisition of ability to propose simple synthetic strategies for the preparation of chemical compounds. Ability to recognize substances dangerous to humans and the environment. *Communicating knowledge and understanding* The acquisition of the capacity and the language necessary for the description of the chemical molecules and their reactions *Capacities to continue learning* *The acquisition of the methodology necessary for learning, the mastery of the discipline, the critical study of the main pollutants of the sea and the methods of prevention and reduction of pollution.*
Contents	Basic knowledge of organic compounds and their reactivity. Information on some classes of compounds of application interest and on aquatic organic pollutants.

Course program	Credit 1. Molecular structure of organic compounds. Molecular geometries, polarity of bonds and polarity of molecules. Credit 2. Intermolecular interactions, condensed states, solubility. Functional groups and classification of organic compounds. Credit 3. IUPAC nomenclature and common of the main classes of organic compounds. Physico-chemical properties of the main classes of organic compounds. Credit 4. Acids and bases. Credit 5. Organic reactions. Credit 6. Aromatic compounds and their reactions Credit 7. Oil: chemical composition and technological aspects. Oil refining and fraction composition. Credit 8. Marine pollution from oil and hydrocarbons. Surfactants: composition and technological applications. Chlorinated organ substances: technological uses and marine pollution. Credit 9. Marine pollution from metals. Elements of explosives chemistry. Classification of the main biological substances.
Bibliography	Introduzione alla Chimi Organica, terza edizione - W. Brown, T. Poon- EdiSES
Notes	
Teaching methods	During the lessons are used various tools such as power point presentations projected in the classroom, schemes, bibliographic references and anything else useful for the improvement of teaching effectiveness.
Assessment methods (indicate at least the type written, oral, other)	The final proof is held in oral form and the evaluation is expressed with a mark out of thirty, with possible honors. Profits checks are made during the course.
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 criteria for the evaluation of the final test take into account the correctness of the contents, the clarity of argument and the ability of critical analysis and re-elaboration. Candidates must show that they have the basic knowledge of organic compounds and their reactivity. Information on some classes of compounds of application interest and on aquatic organic pollutants.
Further information	