

Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
GEM104	Marine Chemistry	1	2	0	0	2	3

Prerequisites	
Admission Requirements	

Language of Instruction	Turkish
Course Type	Compulsory
Course Level	Associate Degree
Objective	1. To teach about basic concepts and basic laws, 2. To teach about maritime chemistry and topics related to it.
Content	Basic concepts and basic laws. Stoichiometric calculations. Gases, liquids and solids. Structure of atom and periodic table. Chemical bonds. Nuclear reactions. Solutions. Heat energy in chemical reactions. Rate of reactions. Equilibrium. Acids and bases. Physical and chemical properties of seawater. Corrosion and corrosion control. Sea paints. Fuel and oil chemistry. Fuel and oil types and properties. Hazardous substances. Sea pollution.
References	

Theory Topics

Week	Weekly Contents
1	Basic concepts and basic laws.
2	Stoichiometric calculations. Gases, liquids and solids
3	Structure of atom and periodic table. Chemical bonds. Nuclear reactions.
4	Solutions. Heat energy in chemical reactions.
5	Rate of reactions. Equilibrium. Acids and bases.
6	Physical and chemical properties of seawater.
7	Corrosion and corrosion control.
8	Sea paints.
9	Fuel and oil chemistry.
10	Fuel and oil chemistry.
11	Fuel and oil types and properties.
12	Fuel and oil types and properties.
13	Hazardous substances. Sea pollution.
14	Hazardous substances. Sea pollution.