

## Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
GEM204	Marine Aux. Machineries I	3	3	0	1	3.5	4

Prerequisites	
Admission Requirements	

Language of Instruction	Turkish
Course Type	Compulsory
Course Level	Associate Degree
Objective	The course provides comprehensive description and offers elaborated explanation for different marine auxiliary machinery systems so that the marine engineering officers understand the rules and regulations and principles of maintenance and running of these machines.
Content	The basics of auxiliary boilers, types and structure of boilers, corrosion in the boilers and steam distribution, running of the boilers, heat distributors. Types of pumps and working principles, pumping systems and controls, Ballast, Bilge, Fire Extinguisher Pumps and their systems Types of Air compressors and their working systems Fuel, Fuel separators, bilge separators and waste water systems
References	Buhar Kazanları Ders Notları/Prof.Dr.Hüsamettin Bulut  Megep Gemi Yardımcı Makinaları  Megep Gemi Dizel Motorları-2

## Theory Topics

Week	Weekly Contents
1	Introduction to concepts
2	Basics of Steam boilers and the types of boilers
3	Fire-Tube Boilers - usage and structures
4	Water-Tube boilers - usage and structures
5	Drum and Heder Boilers
6	Uptake and port boilers
7	Economizers and safety valves
8	Mid term
9	Introduction to pumps - structure and types
10	Ballast, Bilge, fire pumps and their systems
11	Air Compressors and their working systems
12	Fuel and lubricating separators, working systems and maintenance
13	Bilge separator and waste water systems
14	General evaluation