



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### **New materials and technologies applicable in the marine environment**

2223-128R-02

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#### **Title**

New materials and technologies applicable in the marine environment

#### **Teacher(s)**

Marco Contardi

#### **Language**

English

#### **Short description**

Materials and processes applied in the marine environment are a significant source of pollution. Therefore recent studies are focused on green processes and on the utilization of biodegradable materials as valuable alternatives of the already existing ones. In this course a general overview of the materials used in the marine environment will be presented and their contribution to the overall marine pollution will be discussed together with the effects to the marine ecosystem. Then, the recent advances on the development of novel biodegradable materials for marine applications will be presented, and will be discussed how they can reduce the environmental impact and therefore

limit the plastic pollution effects. Finally, some recently developed economically and environmentally sustainable functional materials applied in diverse marine related applications such as water remediation and desalination, green paints for shipping, medication of marine organisms will be presented.

### **CFU / Hours**

1 CFU/8 hours

### **Teaching period**

June 2023

### **Sustainable Development Goals**

INDUSTRY, INNOVATION AND INFRASTRUCTURE

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