



A2. COASTAL MARINE RESOURCES AND SOCIETY

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Course outline-lectures

1. Structure and function of the Mediterranean benthic ecosystem

2. Databases I

Overview of the databases describing vertebrate and invertebrate biology (Fish Base, Sea Life Base, Sea Around Us Project)

3. Databases II

Overview of the databases on landings and fisheries management (FAO global and GFCM regional databases, and RAM Stock Assessment)

4. Mediterranean coastal fisheries

Number of boats, fishing gear and catches of Mediterranean coastal fisheries

5. Mediterranean Deep-Sea Fisheries

6. Upwelling areas and fisheries stocks

Description of the importance of upwelling areas to global fisheries production and biology of small pelagic fish species

7. Climate change and its impact on the Mediterranean ecosystem

8. Climate change and fisheries

The effect of climate change (including NAO and El Nino) on the distribution and abundance of fish species, their biology and fisheries

9. Fisheries biology and stock assessment

Methods of estimating growth and mortality of fish stocks and their use in stock assessment modeling

LABS

1. Laboratory exercises on databases

Computed based practical on the use of databases

2. Excursion with the R/V PHILIA. Sampling methodologies

3. Laboratory exercises on stock assessment analytical tools

Computed based practical on the stock assessment analytical tools using Statistica, FiSAT and R (non-linear and logistic regression, empirical equations, fisheries models)

