Université de Bretagne Occidentale

MASTER BIOLOGIE

PARCOURS INTERNATIONAL MASTER OF SCIENCE IN MARINE BIOLOGICAL RESOURCES (IMBRSEA)

semestre 7

Marine policy and governance

Présentation

The course is devoted to legal reference related with management and administration of marine resources. During the course three levels of related legal references: international, national and regional will be considered as basis to management and conservation. Environmental economics will be introduced, and a few cases of economic valuation will be discussed. Special emphasis will be devoted to the economic analysis of natural resource exploitation of renewable and open access resources, with application to fisheries. The course also addresses marine ecosystem conservation and biodiversity management, with an emphasis on the social-ecological aspects of marine protected areas. It tackles threats to marine conservation and current designs and lessons from the implementation of marine protected areas. The course explores different strategies to manage, control and monitor marine protected areas and their relationship with end users.

3 crédits ECTS

Volume horaire

Cours Magistral : 34h
Travaux Dirigés : 4h
Terrain : 4h

Objectifs

Capacity to understand legal regulations at international, national and regional level for marine resources exploitation and marine biodiversity conservation. Ability to analyze the valorization of marine resources. Ability to understand economic matters concerning externalities and natural resource management. Capacity for a multidisciplinary approach to marine resources and biodiversity. Ability to understand the complexities in managing existing marine protected areas and to adopt decisions for the establishment of new areas. Ability to include social and ecological complexity the management of marine resources. Ability for multidisciplinary work on biodiversity management at different administrative level and in a multi institutional framework.

Pré-requis nécessaires

General knowledge on biology and conservation biology. Some practice with Geographical Information Systems and with internet searches will be helpful. For the Legal and Economic content there are no special prerequisites, as it is an introductory course.

Descriptif

1) Introduction to Marine Resource Management.
2) Ordination of marine space and resources. Relations between different normative levels. Legal framework for marine areas , General Legal Framework on the protection of Biodiversity (Convention on Biological Diversity and Aichi targets)
3) Legal tools for protection of marine ecosystems: principles, prevention of pollution, management and conservation of living resources and biodiversity conservation. International, European and national regulation (European directives including the Water Framework Directive, the Marine Strategy Directive, the Common Fisheries Policy, the Habitats Directive; regional seas conventions like OSPAR or Barcelona; Bern Convention); .
3') Ecosystem services: definitions, assessments including the different methods for monetary assessments, the different values of the nature, uses and misuses of ecosystem services in the biodiversity conservation (see the TEEB initiative, the MAES program or the IPBES)
4) Environmental Economics. Externalities and the cost of pollution. Coase theorem and market failures; Pigouvian taxes and other alternatives: real case studies
5) Economic valuation of natural resources
6) Examples from fisheries management
7) Foundations of Marine Conservation: the targets of marine conservation (from the nature for itself to nature for people)
8) Classical view of MPAs
9) Marine conservation in Europe.
9') High Seas Conservation
9") Marine Spatial Planning
10) Bottom-up approaches: TURFs, ITQs, Co-management.
11) Bottom-up approaches: Community participation and local ecological knowledge

Teaching methods:
Students will be presented a detailed syllabus at the beginning of the course both at the classroom and through the online teaching platform. Teaching will be based on group work, lectures, seminars, self-reliant study activities, field trips and a role play.

Materials:
Computers, selected bibliography and documentation for the role play, GIS software and data layers.

Modalités de contrôle des connaissances

Session 1 ou session unique - Contrôle de connaissances

Nature de l'enseignement	Modalité	Nature	Durée (min.)	Coefficient	Remarques
	CT	Ecrit - devoir surveillé	180	100%	

Session 2 : Contrôle de connaissances

Nature de l'enseignement	Modalité	Nature	Durée (min.)	Coefficient	Remarques
	CT	Ecrit et/ou Oral		100%	