



Degree Course	Master Degree in Biology
Course	Animal Resources
Credits	6
Semester	I
Teacher	Marina Paolucci
PhD students / research assigners who carry out teaching activities to support the course	Dr. Elena Coccia
Reception hours	Always by appointment via email
Address	via Port'Arsa, 11

PRESENTATION OF THE COURSE:

The course offers an overview of the main aquatic animal species used as a food resource and the biological characteristics that influence the choice in this regard. Emphasis is placed on aspects related to reproduction and feeding and the main techniques used to increase the efficiency of both. The course provides the basic information on animal biology indispensable for further studies, in addition to a specific vision and aimed at the exploitation of aquatic species.

THE FORMATIVE OBJECTIVES

Main formative objectives are: 1) the knowledge of animal biology of aquatic species in relation to economic exploitation; 2) the ability to apply this knowledge to identify new species or to improve the farming of those currently destined for human consumption.

PREREQUISITES

None required. However, it is important to have basic knowledge of biology, histology, anatomy and physiology.

FREQUENCY OF LESSONS

It is not compulsory but highly recommended given the complex and varied nature of the topics discussed and the difficulty of retrieving the teaching material that will be provided by the teacher. In addition, the student will be able to take advantage of practical laboratory activity and discussion of experimental protocols during the course.

CONTENTS OF THE COURSE

Fishes: generality and classification. Fish biology with particular attention to nutrition and reproduction. Main species used as food resources. Facts about fish farming. Current state and future prospects. The crustaceans: classification. Biology of decapods with particular attention to nutrition and reproduction. Main species used as food resources. Aims of crustacean farming. Generalities of nutrition of the species under cultivation. Food industry for aquatic species. Animal Resources and Environmental Quality.

DIDACTIC METHODS

Lectures, practical laboratory activity, discussion of cases. The theoretical knowledge provided during the frontal lessons and the laboratory practice enriched by the discussion of real cases and protocols for species farming, will make it possible to achieve the above formative goals.

REFERENCE BOOKS

The teaching material will be provided by the teacher and available on the teacher's own web site after registration (www.marinapaolucci.bio).

EXAM

The final exam is written. It consists of six open response questions. The time available is 60 minutes. They will be evaluated: clarity, correctness and degree of content deepening, synthesis skills. No mid-term exams will take place.

CALENDAR OF THE EXAMS

Go to the link

RESERVATION OF THE EXAMS

Go to the link

SYLLABUS

Subjects	Duration (hours)	Bibliographical references	Type of lesson
Overview of the main aquatic species used as food resources.	2	Scientific Texts and publications on scientific journals	Theoretical
General biology, feeding and reproduction of crustaceans.	8	Scientific Texts and publications on scientific journals	Theoretical and laboratory practical activity
General Biology, Feeding and Reproduction of Fish	8	Scientific Texts and publications on scientific journals	Theoretical and laboratory practical activity
Fish farming.	4	Scientific Texts and publications on scientific journals	Theoretical
Methods commonly used in the modification of the breeding cycle of the breeds	6	Scientific Texts and publications on scientific journals	Theoretical and real cases discussion
Main aspects of feeding strategies	6	Scientific Texts and publications on scientific journals	Theoretical and laboratory practical activity
Animal Resources and Environmental Quality	6	Scientific Texts and publications on scientific journals	Theoretical and real cases discussion