GHENT UNIVERSITY

Course Specifications

Valid as from the academic year 2024-2025

Basic Marine Aquaculture Facility Management (I002877)

Course size *(nominal values; actual values may depend on programme)*

Credits 2.0 **Study time 50 h**

Course offerings in academic year 2024-2025

A (semester 2) English Gent

Lecturers in academic year 2024-2025

Reig Puig, Maria Lourdes	BARCELO3	lecturer-in-charge
Masaló Llora, Ingrid	BARCELO3	co-lecturer

Offered in the following programmes in 2024-2025	**crdts**	**offering**
International Master of Science in Health Management in Aquaculture	2	A

Teaching languages

English

Keywords

Recirculation systems, facilities and equipment management, bioprogramming, routine operations

Position of the course

This course aims at providing the preliminary information that students will need to develop the bioprogramming of an aquaculture facility and to deal with the routine management of facilities and water quality.

Contents

- Individual case study of bioprogramming definition: the information needed for the case study to be developed in the following course, will be searched and the case defined, as follows:
(1) search of production and commercialization data for the selected species, location, physical-chemical data of the water in the selected location, growth and mortality data for the selected species
(2) definition of the case to study,
(3) oral presentation (elevator speech format)
- Water quality and facilities management in marine aquaculture: lab activities will be carried out as fllows:
(1) Description of main equipment for water quality management.
(2) Flow rate and velocity measuring procedure and instruments.
(3) Facilities and equipment maintenance criteria.
(4) Routine procedures.

The activities will be accompanied by specialized visits (Barcelona Central Fish Market and Barcelona Aquarium) and/or selected conferences related to the topics dealt in the course.

Initial competences

Information search on aquaculture topics, use of spread-sheets (i.e. excel)

Final competences

1 *Identify the critical information and criteria needed to develop the productive program (bioprogramming) of a fish farm*
2 *Understand the routine procedures and the criteria for water quality and facility maintenance in marine aquaculture*

Conditions for credit contract

This course unit cannot be taken via a credit contract

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Group work, Seminar, Excursion, Practical, Independent work

Study material

None

References

FAO (2020) El estado mundial de la Pesca y la Acuicultura (SOFIA)
http://www.fao.org/fishery/sofia/en
HUGUENIN, J.E. and COLT J. 1989. Design and operating guide for aquaculture seawater systems. Elsevier. Amsterdam
LEKANG, O.I. (2007) AQUACULTURE ENGINEERING. Blackwell Publishing, UK.
TIMMONS, M.B.and EBELING, J.M. 2010. Recirculating Aquaculture (2nd Ed). NRAC Publication No. 401-2010

Course content-related study coaching

Teacher available for student counselling

Assessment moments

end-of-term and continuous assessment

Examination methods in case of periodic assessment during the first examination period

Written assessment

Examination methods in case of periodic assessment during the second examination period

Written assessment

Examination methods in case of permanent assessment

Professional practice, Oral assessment, Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible in modified form

Calculation of the examination mark

35% Case study definition (portfolio); 15% Elevator speech; 20% Portfolio related to water quality activities; 25% Report about lab activities; 5% Behavioural evaluation accomplishment.
Students who eschew period aligned and/or non-period aligned evaluations for this course unit may be failed by the examiner.