

## Basic Marine Aquaculture Facility Management (I002877)

Due to Covid 19, the education and evaluation methods may vary from the information displayed in the schedules and course details. Any changes will be communicated on Ufora.

Course size *(nominal values; actual values may depend on programme)*  
**Credits 2.0**                      **Study time 50 h**                      **Contact hrs**                      12.5 h

### Course offerings in academic year 2022-2023

A (semester 2)                      English                      Gent

### Lecturers in academic year 2022-2023

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

### Offered in the following programmes in 2022-2023

|   | crdts | offering |
|---|-------|----------|
| <a href="#">International Master of Science in Health Management in Aquaculture</a> | 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 follows:**

*(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**

Demonstration, excursion, group work, online discussion group, practicum, self-reliant study activities, seminar: coached exercises, seminar: practical PC room classes

**Learning materials and price**

*syllabus*

**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*

**Evaluation methods**

end-of-term evaluation and continuous assessment

**Examination methods in case of periodic evaluation during the first examination period**

Written examination

**Examination methods in case of periodic evaluation during the second examination period**

Written examination

**Examination methods in case of permanent evaluation**

Oral examination, portfolio, job performance assessment, report

**Possibilities of retake in case of permanent evaluation**

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.*