GHENT UNIVERSITY

Course Specifications

Valid as from the academic year 2024-2025

Sustainability in Fish and Seafood Production (I002871)

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

Credits 6.0 **Study time 168 h**

Course offerings in academic year 2025-2026

A (semester 2) English Gent

Lecturers in academic year 2025-2026

Schlaman, Geertje LH	WAGENI01	lecturer-in-charge
de Boer, Imke JM	WAGENI01	co-lecturer
Pascucci, Stefano	WAGENI01	co-lecturer
van Hal, Ollie	WAGENI01	co-lecturer
Wiegertjes, Geert F	WAGENI01	co-lecturer

Offered in the following programmes in 2025-2026	**crdts**	**offering**
International Master of Science in Health Management in Aquaculture	6	A

Teaching languages

English

Keywords

Position of the course

Contents

Through an integrated and interdisciplinary approach, students will be challenged to analyse the sustainability of fish and seafood production.
We question ourselves: what do we define as sustainable?
From a managerial point of view, the conceptual dimensions of sustainability will be discussed.
In terms of ecology, students gain insight in different impact categories fish on ecosystems.
The disciplines are brought together. In general, this course aims to educate the student about the challenges of making our food systems more sustainable, develop their critical thinking about the topic of sustainability and raise awareness of the roles and attitudes they can play as scientists, citizens, consumers, or future stakeholders in the value chain.

Initial competences

Competence for admission to EM AquaH study program
Preferred knowledge is APS20806 Systems Approach in Animal Sciences

Final competences

1 After successful completion of this course students are expected to be able to:
- explain the major environmental, social and economic challenges at different scales related to the sustainable development of fish aquaculture.

2 • abstract the main characteristics of an aquaculture production system (environment, species, rearing technology and culture cycle), its inputs and outputs.

3 • explain the cause-effect chain of environmental impacts from aquaculture production systems and suggest mitigation solutions.

4 • illustrate circularity principles in aquaculture and understand the role of aquatic animals in a circular food system.

5 • apply business model innovation and strategies to investigate social justice and economic viability in aquaculture production systems, value chains and food systems.
6 • interpret the environmental, social and economic performances of aquaculture production systems at multiple scales/levels and identify potential tradeoffs among them.
7 • apply foresight analysis to anticipate future changes and provide long-term recommendations related to the sustainable development of the aquaculture sector.

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, Excursion, Lecture, Independent work

Extra information on the teaching methods

- lectures;
- tutorials;
- case study (in groups of approximately 5 students);
- field excursions.

Study material

None

References

Will be available through Brightspace, Learning Management System of Wageningen
including lecture notes and self-tests, articles, presentations and video clips.

Course content-related study coaching

Teaching support by teachers, PhD students and industrial partners connected to this course.

Assessment moments

continuous assessment

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

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

Examination methods in case of permanent assessment

Written assessment with multiple-choice questions, Written assessment with open-ended questions, Written assessment, Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible

Extra information on the examination methods

- individual written digital exam, counting for 40% of the final grade (open and closed questions);
- case study report (groupwork) , counting for 40% of the final grade;
- foresight analysis (individual and group work), counting for 20% of the final grade,
Each component must be scored a 5.50 at least in order to pass the course.
In order to complete the course, all field excursions and tutorials are mandatory.

Calculation of the examination mark

- individual written digital exam, counting for 40% of the final grade (open and closed questions);
- case study report (groupwork) , counting for 40% of the final grade;
- foresight analysis (individual and group work), counting for 20% of the final grade,
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