GHENT UNIVERSITY

Course Specifications

Valid in the academic year 2023-2024

Bioreactor and Microalgae (C004460)

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

Credits 3.0 **Study time 75 h**

Course offerings in academic year 2023-2024

A (semester 1)	English	Gent

Lecturers in academic year 2023-2024

Offered in the following programmes in 2023-2024	crdts	offering
International Master of Science in Marine Biological Resources	3	A

Teaching languages

English

Keywords

Position of the course

Contents

Fundamentals of main unit operations encountered in microalgae harvesting, cells disruption and metabolites extraction will be presented. This comprises centrifugation, membrane concentration or fractionation, high pressure or bead milling cell disruption and solvent extraction.

Initial competences

Final competences

To know the available techniques, to understand their main engineering aspects and to be able to propose a process scheme for a microalgae metabolite valorization.

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Extra information on the teaching methods

Students will have to manage in small group a biorafinery practical case from the photobioreactor to the fraction of interest.

Learning materials and price

References

Course content-related study coaching

Assessment moments

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

Possibilities of retake in case of permanent assessment

not applicable

Calculation of the examination mark