UNIVERSITEIT GENT

Studiefiche

Vanaf academiejaar 2024-2025

Aquaculture Nutrition (I002794)

Cursusomvang *(nominale waarden; effectieve waarden kunnen verschillen per opleiding)*

Studiepunten 5.0 **Studietijd 150 u**

Aanbodsessies in academiejaar 2024-2025

A (semester 2) Engels Gent

Lesgevers in academiejaar 2024-2025

Fievez, Veerle LA22 Verantwoordelijk lesgever

Aangeboden in onderstaande opleidingen in 2024-2025	stptn	aanbodsessie
Master of Science in Aquaculture	5	A
Uitwisselingsprogramma bio-ingenieurswetenschappen: landbouwkunde (niveau master-na-bachelor)	5	A

Onderwijstalen

Engels

Trefwoorden

Aquaculture, nutrition, food, feed.

Situering

The course covers a number of general and specific issues related to (non-live) feed requirements, feed characteristics, feed production, feeding practices in an aquaculture context.

Inhoud

1. Aquaculture feed ingredients, feed analysis, chemical and nutritive characteristics of feedd ingredients
2. Aquaculture feed production technology
3. Nutritional requirements of aquaculture organisms
4. Efficiency of use of feed by aquaculture organisms: feed conversion ratio; fish-in/fish-out-ratio
5. Sustainability in feed production; alternative feed ingredients: potentials and challenges
6. Aquaculture feed formulation based on linear programming and aquaculture feed analysis
7. Excursion

Begincompetenties

General biology, chemistry, biochemistry and basic knowledge on aquaculture.

Eindcompetenties

1 The student is able to enumerate the main ingredients being used for aquaculture feeds, their advantages and disadvantages, and is able to critically evaluate tendencies within aquaculture nutrition with a focus on enhanced sustainability of rearing practices
2 The student is able to explain why an ingredient is suitable for the production of feeds in the aquatic environment.
3 The student understands which feed ingredients are necessary, and in which proportions, to compose a balanced artificial aquaculture diet depending on the species and the rearing context
4 The student is able to describe how the organism takes advantage of the feed ingredients and how feed formulation is related to intake and digestion by the organism.

5 The student is able to describe the various methods for feed analysis and can argue why they may be suitable in a scientific and/or an industrial production environment.
6 The student has insight into compound feed formulation based on linear programming

Creditcontractvoorwaarde

Toelating tot dit opleidingsonderdeel via creditcontract is mogelijk mits gunstige beoordeling van de competenties

Examencontractvoorwaarde

Dit opleidingsonderdeel kan niet via examencontract gevolgd worden

Didactische werkvormen

Werkcollege, Excursie, Hoorcollege, Practicum, Zelfstandig werk

Toelichtingen bij de didactische werkvormen

Theory lectures: lectures based on powerpoint presentations and videos.
Exercises: virtual lab excercise on feed analysis; guided exercises on linear programming in feed formulation.
Excursion: visit to feed production plant and to aquaculture facilities

Studiemateriaal

Type: Slides

Naam: Cursusnota's incl. slides
Richtprijs: Gratis of betaald door opleiding
Optioneel: nee
Taal : Engels
Beschikbaar op Ufora : Ja

Referenties

Vakinhoudelijke studiebegeleiding

Lecturers are available during and after the classes.
Further study guidance upon request by email or on appointment.

Evaluatiemomenten

periodegebonden evaluatie

Evaluatievormen bij periodegebonden evaluatie in de eerste examenperiode

Mondelinge evaluatie, Schriftelijke evaluatie

Evaluatievormen bij periodegebonden evaluatie in de tweede examenperiode

Mondelinge evaluatie, Schriftelijke evaluatie

Evaluatievormen bij niet-periodegebonden evaluatie

Tweede examenkans in geval van niet-periodegebonden evaluatie

Examen in de tweede examenperiode is mogelijk

Toelichtingen bij de evaluatievormen

Period aligned evaluation: theory: written closed book exam.
Non-period aligned evaluation: exercises and excursion: participation and report.

Eindscoreberekening

Between 5 to 8 questions; all questions make an equal contribution to the final score. The exam is a mix of questions with written preparation and oral explanation; written theory questions; calculation exercise; interpretation of linear programming case.

Students that do not attend the practical or excursion without a valid reason, should retake the course the next academic year.

Students who eschew period aligned and/or non-period aligned evaluations for this course unit may be failed by the examiner.