UNIVERSITEIT GENT

Studiefiche

Vanaf academiejaar 2022-2023

Aquaculture Nutrition (I002794)

Wegens Covid19 kan mogelijk afgeweken worden van de onderwijs- en evaluatievormen. Dergelijke afwijkingen zullen via Ufora worden gecommuniceerd.

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

Studiepunten	**5.0**	**Studietijd**	**150 u**	**Contacturen**	50.0 u

Aanbodsessies in academiejaar 2022-2023

A (semester 2)	Engels	Gent

Lesgevers in academiejaar 2022-2023

Fievez, Veerle	LA22	Verantwoordelijk lesgever
Fremaut, Dirk	LA22	Medewerker

Aangeboden in onderstaande opleidingen in 2022-2023	**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 programmingquaculture 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

Begeleide zelfstudie, demonstratie, excursie, hoorcollege, werkcollege: geleide oefeningen

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

Leermateriaal

Printout of the powerpoint presentation will be available during all classes.
Estimated cost of the printouts: 20 euro (included in fee that is paid in the beginning of the academical year).

Referenties

Vakinhoudelijke studiebegeleiding

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

Evaluatiemomenten

periodegebonden en niet-periodegebonden evaluatie

Evaluatievormen bij periodegebonden evaluatie in de eerste examenperiode

Schriftelijk examen

Evaluatievormen bij periodegebonden evaluatie in de tweede examenperiode

Schriftelijk examen

Evaluatievormen bij niet-periodegebonden evaluatie

Participatie, verslag

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

Out of 20:
17 points attributed to written exam; 3 points attributed to the excursion report
Students that do not attend the 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.