

## Applied Marine Fish Larviculture (I002855)

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

<b>Cursusomvang</b>	<i>(nominale waarden; effectieve waarden kunnen verschillen per opleiding)</i>		
Studiepunten	3.0	Studietijd	90 u
Contacturen			30.0 u
<b>Aanbodsessies in academiejaar 2022-2023</b>			
A (semester 2)	Engels		Gent

### Lesgevers in academiejaar 2022-2023

Bossier, Peter LA22 Verantwoordelijk lesgever

### Aangeboden in onderstaande opleidingen in 2022-2023

	stptn	aanbodsessie
<a href="#">Master of Science in Aquaculture</a>	3	A

### Onderwijsstalen

Engels

### Trefwoorden

*Hatchery, fish larva, live food, Artemia, rotifer, cyst, quality control*

### Situering

*The aim of this course is to provide knowledge on practical applications of live food in marine fish larviculture. This is mainly achieved by a number of practical classes and hands-on exercises, related to the laboratory culture of fish larvae and the use of live food*

### Inhoud

1. Design and practical application of a larval fish feeding regime; assessment of fish larval performance
2. Quality control in live food commercial products, especially Artemia cysts
3. Methodologies for practical application of Artemia in hatcheries
4. Design and practical application of rotifer laboratory cultures

### Begincompetenties

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

### Eindcompetenties

- 1 The student is able to apply practical techniques related to the use of Artemia in larviculture (such as cyst decapsulation, nauplius enrichment, cyst quality control) and can report about them.
- 2 The student is able to run a rotifer batch culture and has insight into rotifer recirculation production systems, and can report about this.
- 3 The student is able to run a larval fish culture at laboratory scale, including aspects such as supply of artificial and live food (calculation of needed amounts of artificial and live food), zootechnical aspects including maintenance of recirculation system, analysis of parameters related to fish larval growth, and is able to report about this in a written report in the format of a scientific paper.

### 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

Demonstratie, groepswerk, hoorcollege, practicum

## Toelichtingen bij de didactische werkvormen

*Theoretical lecture introduces to a number of practicals, labworks and demonstrations, for which students are organized in groups (with individual report). Depending on the labwork (nature of work and duration of the test, e.g. prolonged fish larviculture test vs. short guided labwork), more or less independent working is required*

## Leermateriaal

*Printouts of the power point presentation are available during all classes.*

*Estimated cost of the printouts: 10 euro (included in fee that is paid in the beginning of the academic year).*

*Pdf of the lectures and video clips of specific course contents is available through Ufora*

## Referenties

- *Manual on the Production and Use of Live Food for Aquaculture. FAO Fisheries Technical Paper no 361*
- *K. Hamre, M. Yúfera, I. Rønnestad, C. Boglione, L. Conceição, M. Izquierdo. 2013. Fish larval nutrition and feed formulation: knowledge gaps and bottlenecks for advances in larval rearing. Reviews in Aquaculture <https://doi.org/10.1111/j.1753-5131.2012.01086.x>*
- *L. Conceição, M. Yúfera, P. Makridis, S. Morais, M.T. Dinis. 2010. Live feeds for early stages of fish rearing <https://doi.org/10.1111/j.1365-2109.2009.02242.x>*

## Vakinhoudelijke studiebegeleiding

*Study guidance upon request by email or on appointment*

## Evaluatiemomenten

niet-periodegebonden evaluatie

## Evaluatievormen bij periodegebonden evaluatie in de eerste examenperiode

## Evaluatievormen bij periodegebonden evaluatie in de tweede examenperiode

## Evaluatievormen bij niet-periodegebonden evaluatie

Participatie, werkstuk, verslag

## Tweede examenkans in geval van niet-periodegebonden evaluatie

Examen in de tweede examenperiode is mogelijk

## Toelichtingen bij de evaluatievormen

*Non-period related evaluation: individual reports of labworks/practicals (including a report in the format of a peer-reviewed paper); participation to labworks/practicals*

## Eindscoreberekening

*The various labwork/reports together contribute 100% of the total score, second chance exam constitutes an upgraded version of the reports*

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