

## Technology of Fishery Products (I001084)

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** 3.0      **Studietijd** 75 u      **Contacturen** 30.0 u

### Aanbodsessies en werkvormen in academiejaar 2020-2021

A (semester 1)	Engels	Gent	begeleide zelfstudie	3.75 u
			werkcollege: geleide oefeningen	5.0 u
			hoorcollege	17.5 u
B (semester 1)				

### Lesgevers in academiejaar 2020-2021

Devlieghere, Frank	LA23	Verantwoordelijk lesgever
Kuuliala, Lotta	LA23	Medelesgever

### Aangeboden in onderstaande opleidingen in 2020-2021

	stptn	aanbodsessie
<a href="#">Bachelor of Science in Food Technology</a>	3	A
<a href="#">Master of Science in Aquaculture</a>	3	A
<a href="#">Master of Science in Food Technology</a>	4	B
<a href="#">Uitwisselingsprogramma bio-ingenieurswetenschappen: landbouwkunde (niveau master-na-bachelor)</a>	3	A
<a href="#">Uitwisselingsprogramma bio-ingenieurswetenschappen: Food Science and Nutrition (niveau master-na-bachelor)</a>	4	B

### Onderwijstalen

Engels

### Trefwoorden

Fish technology, fish processing, fish quality, spoilage, safety, preservation

### Situering

The aim of this course is to create an insight in the relation between post-mortem changes in fish and the consequences on its quality and further processing. Furthermore, the students should get familiar with the different processes used in the fish industry as well as aspects of safety and quality and basic principles of legislation and hygienic processing.

### Inhoud

#### Theory:

1. Chemical composition
2. Post-mortem changes in fish
  - 2.1. Rigor mortis
  - 2.2. Autolytic changes
  - 2.3. Bacteriological changes
  - 2.4. Rancidity
  - 2.5. Physical changes
3. Technological processes
  - 3.1. Chilling
  - 3.2. Freezing
  - 3.3. Modified atmosphere packaging (MAP)
  - 3.4. Canning
  - 3.5. Curing

- 3.6. Marinades
4. Basic principles of legislation and PRP related to fish processing.
5. Quality monitoring of fish and fishery products
6. Safety aspects of fish and fishery products

**Practice:**

Case studies on fish processing

**Begincompetenties**

General knowledge on biochemistry and microbiology

**Eindcompetenties**

- 1 To have insights in the properties and post-mortem changes of fish as a raw material and how these properties influence the quality of the derived fish and fishery products.
- 2 To have insights in how processing used for the production of fishery products influences the properties and the quality of the produced product.
- 3 To be able to identify and explain the consecutive steps in the production of a fishery product.
- 4 To be able to argument on quality and safety aspects of fishery products in a certain situation.
- 5 To be able to critically reflect and make substantiated decisions based on scientific literature related to fish processing/technology.

**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, hoorcollege, werkcollege: geleide oefeningen

**Toelichtingen bij de didactische werkvormen**

Lecture: the theory is given in lectures

Seminar: coached exercises: these comprise 2 plenary discussions of a case study.

Independent work: to prepare the case studies

**Leermateriaal**

English course notes with literature references are available. Geraamde totaalprijs: 15 EUR

**Referenties**

Fish processing technology. 1992. Ed. G.M. Hall. Blackie Academic & Professional

Evaluation of seafood freshness quality. 1995. Ed. E.R. Botta. VCH

Fish handling and processing. 1982. Ed. A. Aitken, I.M. Mackie, J.H. Meritt & M.L.

Windsor. Government Bookshops

Quality Management Systems in the Food Industry. 2005. Baert, K., Devlieghere, F.,

Jacxsens, L. & Debevere, J. St. Kliment Ohridski Universtiy Press. ISBN 90-5989-055-8

**Vakinhoudelijke studiebegeleiding**

Before and after the lectures and exercises, the student can ask additional information or explanation to the teacher or assistant. The teacher and assistant can also be contacted by mail.

**Evaluatiemomenten**

periodegebonden en niet-periodegebonden evaluatie

**Evaluatievormen bij periodegebonden evaluatie in de eerste examenperiode**

Schriftelijk examen met open vragen

**Evaluatievormen bij periodegebonden evaluatie in de tweede examenperiode**

Schriftelijk examen met open vragen

**Evaluatievormen bij niet-periodegebonden evaluatie**

Participatie, werkstuk

**Tweede examenkans in geval van niet-periodegebonden evaluatie**

Examen in de tweede examenperiode is enkel mogelijk in gewijzigde vorm

**Toelichtingen bij de evaluatievormen**

The assignment includes the preparation of case studies.

The participation includes active participation and significant and valuable contribution to the plenary discussion of the case studies.

**Eindscoreberekening**

Theory: (67%)

Practice: (33%): This comprises the preparation of the case studies and active participation to the plenary discussion.

The student needs to participate to all assignments and exams that are part of the evaluation (period aligned and non-period aligned). Students who eschew period aligned and/or non-period aligned evaluations for this course unit, or when one obtains a score lower than 8/20 (not rounded up) on one of both parts (period aligned or non-period aligned evaluation), they will fail for this course unit. In that case the end score is set to 9/20 even when the calculation indicates a point of 10/20 or more.