

Technology of Fishery Products (I001084)

Course size (nominal values; actual values may depend on programme)
 Credits 3.0 Study time 75 h Contact hrs 30.0 h

Course offerings and teaching methods in academic year 2019-2020

A (semester 1)	English	seminar: coached	10.0 h
		exercises	
		excursion	5.0 h
		lecture	12.5 h
		guided self-study	2.5 h

Lecturers in academic year 2019-2020

Devlieghere, Frank LA23 lecturer-in-charge

Offered in the following programmes in 2019-2020

	crdts	offering
Bachelor of Science in Food Technology	3	A
Master of Science in Aquaculture	3	A

Teaching languages

English

Keywords

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

Position of the course

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 quality assurance systems for the fish processing industry.

Contents

The theory and exercises of this partim is part of the course 'Technology of Fishery Products', from the Master of Science in Food Technology, and are given simultaneously.

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. Safety aspects of fish and fishery products

Practical work:

1. Assessment of quality parameters of raw fish: theory
2. Case study on Pangasius processing

3. Normally a company visit is organised

Initial competences

General knowledge on biochemistry and microbiology

Final competences

- 1 To have insight in the properties of fish as a raw material and how these properties influence the quality of the derived fish and fishery products
- 2 Having insight in how processing used for the production of fishery products influences the properties and the quality of the produced product
- 3 The student is able to identify the consecutive steps in the production of a fishery product and is able to build a HACCP system for this production

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

Guided self-study, excursion, lecture, seminar: coached exercises

Learning materials and price

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

References

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

Course content-related study coaching

Before the theory and the theoretical exercises, contact hours are scheduled. During these contact hours the student can ask additional information or explanation to the teacher. The practical exercises are guided by a teaching assistant.

Evaluation methods

end-of-term evaluation and continuous assessment

Examination methods in case of periodic evaluation during the first examination period

Written examination with open questions

Examination methods in case of periodic evaluation during the second examination period

Written examination with open questions

Examination methods in case of permanent evaluation

Oral examination

Possibilities of retake in case of permanent evaluation

examination during the second examination period is not possible

Extra information on the examination methods

The oral part of the non-periodic evaluation consists of a presentation of the results of a case study

Calculation of the examination mark

Theory: (75%)

Exercises: (25%): 2/3 is scored on the oral presentation of the results of the case study, 1/3 is scored on a theoretical HACCP question given at the final examen.

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