

Course Title: Nutritional aspects and Food safety

Name of the course coordinator: Aniello Anastasio

Name of the teachers (with affiliation):

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Course aims (max 500 characters spaces included):

Recently, the perception of fish as healthy food has been troubled by less favourable information regarding safety risks, more specifically the potential adverse health impact of chemical and biological contamination in wild and farmed fish and seafoods. In this context this course aims to train personnel operating in fish companies in the application of internationally agreed approach for food safety and quality control.

Intended learning outcomes:

- To understand the role of food and nutrition in public health
- To approach to Chemical and biological contamination in wild and farmed fish and seafoods, Zoonoses and foodborne diseases
- To achieve an overview of HACCP system and global quality approach (i.e. ISO) in food safety and quality control (GMP GHP SSOP)
- To understand Nutritional value of seafood

Course contents

	Hours
The role of food and nutrition in public health	4
This module will focus on topics related to the benefits of a diet rich in fishery products.	
Chemical contamination in wild and farmed fish and seafoods	7
This module will focus on current issues correlated to fish consumption	
Antibiotics in wild and farmed fish	4
This module will focus on current issues related to antibiotics and resistance	
Biological contamination and foodborne diseases in wild and farmed fish and seafoods	7
This module will focus on current issues correlated foodborne diseases	
Zoonoses	6
This module will focus on Zoonoses correlated to fish consumption	

Standard operating procedures and HACCP system in primary and post primary production in the fish supply chain	8
The Hazard Analysis and Critical Control Point system and global quality approach are the internationally agreed approach for food safety and quality control. This module will focus on standard operating procedures, hazards and risk evaluation and management along fish chain.	
Nutritional value of seafood	4
The role of seafood in the supply of essential fatty acids.	

Course material:

The referencing material to be used during the course will comprise Powerpoint presentations, video and virtual tours of fish companies, links to external resources (i.e. youtube)

Teaching method (max 500 characters spaces included):

Training will consist of online theoretical and practical sessions such as simulations, case studies, group exercises. To promote innovative, practice-oriented and integrated educational paths for professional figures, short courses, webinars, case studies, exercises, practical learning days and practical experiences will be used as training methods to reach expertises in a diverse manner keeping trainees attentive and involved. In addition, self-learning and [e-learning](#) tools will be encouraged.

Assessment method and criteria (max 500 characters spaces included):

The evaluation method to be applied will be composed questionnaire and group seminars on the subject of each module.

Notes and prerequisites:

please indicate the competences or the academy entry level required.

Course Structure

On-line phase (16h)	Format <i>(audio-video, video-lessons, text, etc.)</i>	Face to face phase (24h)	Format <i>(audio-video, video-lessons, text, etc.)</i>
1) The role of food and nutrition in public health	Recorded Video lesson Link to external resources Text – ppt presentation	1) Focus on Chemical contamination in wild and farmed fish and seafoods (plastics, pharmaceutical and personal care products, heavy metals etc)	Video lesson – ppt presentation Case study
2) Chemical contamination in wild and farmed fish and seafoods (general)	Recorded Video lesson Text – ppt presentation	2) Focus on biological contamination and foodborne diseases in wild and farmed fish and seafoods (bacteria, viruses Vibrio etc)	Video lesson ppt presentation
3) Biological contamination and foodborne diseases in wild and farmed fish and seafoods (general)	Text – word lesson Text – ppt presentation	3) Focus on Zoonoses (parasites)	Video lesson ppt presentation Case study Virtual tour of a fish company
4) Zoonoses (general)	Text – word lesson	4) Focus on on current issues related to antibiotics and resistance	Video lesson ppt presentation
5) Nutritional value of seafood (omega 3, differences in wild and farmed fish etc)	Text – word lesson Link to external resources	5) Focus on specific Standard operating procedures in primary and post primary production in the fish supply chain	Video lesson Case study Seminars Exercises Virtual tour of a fish company ppt presentation
6) Standard operating procedures and HACCP system in primary and post primary production in the fish supply chain	Text – ppt presentation		