



IDENTIFYING DATA

Food security of fishery and aquaculture products

Subject	Food security of fishery and aquaculture products			
Code	V11M085V02304			
Study programme	Máster Universitario en Ciencia y Tecnología de Conservación de Productos de la Pesca			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Mandatory	2nd	1st
Teaching language	Spanish Galician			
Department				
Coordinator	Longo González, María Asunción			
Lecturers	Avendaño García, Jose M ^a Calvo Iglesias, Juan Fontán Pérez, Noa Longo González, María Asunción Ruiz Blanco, Carlos S. Viñuela Rodríguez, José Ángel			
E-mail	mlongo@uvigo.es			
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General description	In this course, Self-control in the food chain, production control, logistics and assurance, quality management and quality certification will be addressed.			

Training and Learning Results

Code	
A2	That students know how to apply the knowledge acquired and their ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their area of study.
A3	That students are able to integrate knowledge and face the complexity of making judgments based on information that, being incomplete or limited, includes reflections on social and ethical responsibilities linked to the application of their knowledge and judgments.
A5	That students have the learning skills that allow them to continue studying in a way that will be largely self-directed or autonomous.
B1	That the students acquire the comprehension, analysis and synthesis capacities.
B4	That the students develop the problem-solving abilities of application of the theoretical knowledge in practice.
C13	Assess the importance of the control and certification of the quality of fishery products as a commercial weapon and with a view to traceability and food safety.
C14	Know the food alert management procedures by the competent authority and those responsible for the food chain
C15	Know the critical variables that determine the viability of a product or novel processes. Use tools to obtain critical information for feasibility.
D1	Ability to understand the meaning and application of the gender perspective in the different fields of knowledge and professional practice with the aim of achieving a more just and egalitarian society.
D2	Sustainability and environmental commitment. Equitable, responsible and efficient use of resources.
D5	Commitment to ethics in the profession and in society.

Expected results from this subject

Expected results from this subject	Training and Learning Results
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Interpret legislation on the self-control of fishery products, legislation on hygiene, labeling and food safety.	A2 A3 C13 C14 D1 D2
Apply in a practical way the analysis of hazards and critical control points (HACCP), with the peculiarities of each type of process.	A3 A5 B1 B4 C14 C15 D1 D5
Assess the importance of the control and certification of the quality of food products from the sea as a commercial weapon and with a view to traceability and food safety.	A3 A5 B1 B4 C13 C14 C15 D2 D5
Know the management procedures of Food Alerts by the competent authority and those responsible for the food chain.	A2 A3 B1 B4 C13 C14 C15 D2 D5
Actions of the Official Control Laboratories of fishery and aquaculture products (PPAs).	A2 A3 B1 B4 C13 C14 C15 D1 D2 D5

Contents

Topic	
ITEM 1. Self-control in the chain of feeding.	- Traceability. - HACCP. - Study of deviations. - Aspects of practical implementation
ITEM 2. Container-food interactions.	Aspects of Container-food Interactions
ITEM 3. Standards ESO 9000.	- Application to the processes of elaboration of fishing products. - Critical control points.
ITEM 4. Official control of fishery products from third countries.	Official control of fishery products from third countries.
ITEM 5. Official control laboratories of fishing products	Official control laboratories of fishing products
ITEM 6. Official control of fishery products in the EU.	Official control of fishery products in the EU.

Planning

	Class hours	Hours outside the classroom	Total hours
Lecturing	28	66	94
Case studies	5	12	17
Studies excursion	3	3	6
Seminars	2	2	4
Objective questions exam	1	1	2

Self-assessment 1 1 2
 *The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies	
	Description
Lecturing	Explanation by the lecturer of the contents of the course, theoretical bases and exercises to be developed by the student. Blackboard and audiovisual means will be used.
Case studies	Resolution of cases, doubts and queries both individually or in a small group regarding the follow-up and study of the lessons of the subject.
Studies excursion	Activities of application of knowledge to specific situations and acquisition of basic and procedural skills related to the subject matter of study. They take place in non-academic outdoor spaces. These include field practices, visits to events, research centers, companies, institutions, etc.
Seminars	Personalized and/or group tutorials: student interviews with the course's teaching staff for advice / development of activities of the learning process.

Personalized assistance

Methodologies	Description
Lecturing	The lecturers will answer the questions posed by the students, in face-to-face or online tutorials, or by e-mail.
Case studies	The student will be guided in the acquisition of basic skills and problem solving related to the subject matter of study. The progress of the student will be monitored.
Studies excursion	Guidance and advice in a small group by the teacher on the concepts of field practices, company visits, etc.
Seminars	The student receives, in group and/or individually, advice from the teacher on the theoretical and practical concepts of the subject, for the development of the objectives of the course.

Assessment

	Description	Qualification	Training and Learning Results			
Lecturing	The attendance and participation of the students in the classes, in the discussion of contents and exercises, will be evaluated.	20	A2 A3	B1 B4	C13 C14 C15	D1 D2
Case studies	Problem solving and practical cases will be evaluated, as well as the student's autonomous work	20	A2 A3	B1 B4	C13 C14 C15	D1 D2
Objective questions exam	There will be an exam with multiple choice questions that will evaluate the theoretical and practical knowledge acquired in the course.	40	A3 A5	B4	C13 C14 C15	D1 D2 D5
Self-assessment	Test-type questionnaires will be carried out through the teaching platform, so that students can evaluate their degree of acquisition of the subject's competences.	20	A3 A5	B4	C13 C14 C15	D1 D2 D5

Other comments on the Evaluation

To pass the course, the student must obtain a grade equal to or greater than 4.5 points out of 10 in the final exam. In case of not reaching this grade, a "Fail" grade will be assigned, with the numerical value of the grade obtained in the final exam.

Sources of information

Basic Bibliography

FAO, **El Pescado Fresco: su calidad y cambios en su calidad**,
 FAO, **Sistemas de Calidad e Inocuidad de los alimentos. Manual de Capacitación sobre higiene de los alimentos y sobre el sistema de análisis de Peligros y de Puntos de Control Críticos**,
 FAO, **Food safety risk analysis**,
 A. Ruiter, **El pescado y los productos derivados de la pesca. Composición, propiedades nutritivas y estabilidad**, Editorial Acribia,

WHO, **Training Considerations for the Application of the Hazard Analysis Critical Control Point System to Food Processing and Manufacturing**,

Gobierno Vasco, **Estándar de referencia de los sistemas de autocontrol de empresas alimentarias basados en el APPCC/HACCP**,

Complementary Bibliography

Jean-Yves Leveau y Marielle Bouix, **Manual Técnico de Higiene, Limpieza y Desinfección**,

Ramón Madrid, Juana Mary Madrid, Antonio Madrid, **La limpieza y desinfección en las industrias alimentarias, ILE- Julio-Agosto, 33-38, Roy Kirby., HACCP in practise,**
Roy Kirby., **HACCP in practise, Food Control,**
Stumbo, C. R., J.R. Murphy, and J. Cochran, **Nature of Thermal death time curves for P.A. 3679 and Clostridium botulinum,**

Recommendations

Other comments

In case of discrepancies, the Spanish version of this guide will prevail.
