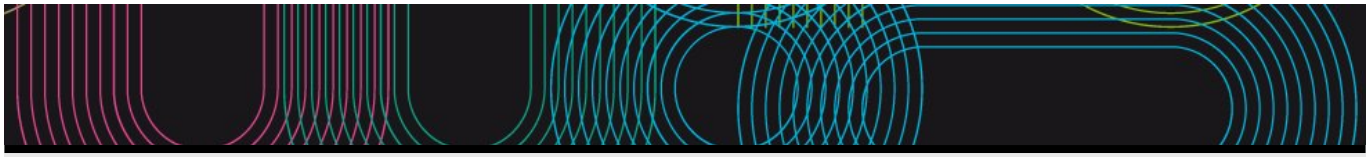

IDENTIFYING DATA				
Marine species of commercial interest. Biology, parasitology and microbiology. Species identification				
Subject	Marine species of commercial interest. Biology, parasitology and microbiology. Species identification			
Code	V11M085V02104			
Study programme	Máster Universitario en Ciencia y Tecnología de Conservación de Productos de la Pesca			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	3	Mandatory	1st	1st
Teaching language	Spanish Galician			
Department				
Coordinator	Longo González, María Asunción			
Lecturers				
E-mail				
Web	http://http://webs.uvigo.es/pesca_master/			
General description	The objective of this course is to know and differentiate the main fishing and aquaculture species of interest in our country, as well as describing the nutritional values of fishery products. The aim is to know and understand the fundamental aspects of the biology of fish and cephalopods and the basic aspects of bivalve and crustacean biology, as well as acquiring basic knowledge about parasitology of fishery products. Also, the alteration of the fishing products and the factors that influence their quality will be evaluated, studying the microbiology of fishery products and the basic aspects of the techniques of species identification by DNA analysis.			

Training and Learning Results	
Code	
A1	Possess and understand knowledge that provides a basis or opportunity to be original in the development and / or application of ideas, often in a research context.
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.
C1	Know and differentiate the main fishing and aquaculture species of commercial interest in our country, with its main biological characteristics.
D4	Creativity, initiative and entrepreneurial spirit.
D5	Commitment to ethics in the profession and in society.

Expected results from this subject	
Expected results from this subject	Training and Learning Results

That students know how to identify marine species of commercial interest.	A1 A3 B1 C1 D4
That the students know the biology of the different fish, cephalopods, molluscs, bivalves and crustaceans.	A3 A5 B4 C1 D4
That students know how to differentiate marine parasites of economic and sanitary importance.	A1 A5 B1 C1 D5
That the students know the pathogenic microorganisms and the norms that guarantee consumer health.	A1 A3 B1 C1 D4 D5

Contents
Topic
Lesson 1. Marine species of commercial interest. Introduction.
Lesson 2. Biology of fish and cephalopods.
Lesson 3. Biology of bivalve molluscs and crustaceans.
Lesson 4. Basic parasitology. Parasitology of fish, bivalves and cephalopods.
Lesson 5. Marine parasites of economic and health importance (zoonoses). Anisakis and Pseudoterranova. Parasites as biological markers.
Lesson 6. Microorganisms present in fishery products. Origin and factors influencing the fish microbiota.
Lesson 7. Pathogenic microorganisms: standards to guarantee consumer health.
Lesson 8. Species identification.

Planning			
	Class hours	Hours outside the classroom	Total hours
Lecturing	16	40	56
Case studies	4	7	11
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 course contents.
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 email.

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.
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	A1	B1 B4	C1	D4
Case studies	Problem solving and practical cases will be evaluated, as well as the student's autonomous work.	20		B1 B4	C1	D5
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	A1 A3 A5	B1 B4	C1	D4 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	A1 A3 A5	B1 B4	C1	D4 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.

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Recommendations

Other comments

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