Universida_{de}Vigo

Subject Guide 2023 / 2024

IDENTIFYI	NG DATA				the lab content
Chemical a	Chamical analysis	tic and abiotic co	ontaminants. Qua	lity control in	the laboratory.
Subject	of fishery products				
	Biotic and abiotic				
	contaminants				
	Ouality control in				
	the laboratory.				
Code	V11M085V02106				
Study	Máster				
programme	Universitario en				
	Ciencia y				
	Tecnología de				
	Conservación de				
	Productos de la				
Doccriptors	ECTS Crodits		Chaosa	Voar	Quadmostor
Descriptors	3		Mandatory	1ct	
Teaching			Mandatory		
language	Galician				
Departmen					
Coordinator	Longo González, María Asunción				
Lecturers					
E-mail					
Web	http://http://webs.uvigo.es/pesca_	master/			
description	nutritional aspects of fishery and a abiotic contaminants (heavy meta indicating the most appropriate ar obtained. quality in the laboratory	ts to acquire the n aquaculture produ ils, marine biotoxir nalytical methodol 7.	ecessary knowledge cts. Likewise, aspec is, biogenic amines, ogy in each case an	e about the che ts related to th , etc.) in them v d the basic too	mical composition and e analysis of biotic and vill be delved into, s that allow data to be
Training a	nd Learning Results				
Al Bossor	c and understand knowledge that n	rovidos a basis or	apportunity to be a	riginal in the de	volopment and / or
AI FUSSES	ation of ideas often in a research co	ntext	opportunity to be of	nginai in the de	velopment and / of
A4 That st	rudents know how to communicate	their conclusions	and the knowledge	and ultimate re	asons that sustain them
to spe	cialized and non-specialized audience	ces in a clear and u	unambiguous way.		
A5 That st	udents have the learning skills that	allow them to cor	tinue studying in a	way that will be	e largely self-directed or
autono	omous.		, .	-	
B1 That th	ne students acquire the comprehens	sion, analysis and s	synthesis capacities		
B5 That th	hat the students develop the abilities of teamwork, enriched by the pluridisciplinarity.				
C3 Acquir	e basic knowledge about laboratory	analytical control	of fishery products,	including the b	oiotic and abiotic
contar	ninants potentially present in them.				
DI Ability	to understand the meaning and appresent the second practice with the sim of achie	plication of the ger eving a more just a	nder perspective in i nd egalitarian socie	the different fie	lds of knowledge and
D2 Sustai	nability and environmental commitmed	nent. Equitable, re	sponsible and efficie	ent use of resou	Irces.
US COMM	itment to ethics in the profession ar	na in society.			
_					
Expected I	esults from this subject				
Expected re	suits from this subject				Training and Learning Results

That students know the chemical composition and nutritional aspects of fishery products and aquaculture. Al

B1 C3 D1 D2

That the students know the techniques of atomic	A4		
fishing products			B1
			B5
			C3
		-	D2
That the students know the biotic and abiotic cor	ntaminants and their analys	is.	A4
			A5
			BI
That the students know the metallic toxing amin	os and marino histoxins an	d thoir analysis	
That the students know the metallic tokins, amin		u their analysis.	A1 A4
			R5
			C3
			D1
			D2
That the students know the quality control in an	analytical laboratory refere	nce materials and validatio	n 44
That the stadents know the quality condition in any			Δ5
			R5
			C3
			D2
			D5
			-
Contents			
Торіс			
1. Chemical composition and nutritional aspects	(*)		
of fishery and aquaculture products.			
2. The analytical process of decision making and	(*)		
experimentation to consider. Analytical			
methodology.			
3. Biotic and abiotic contaminants and their	(*)		
analysis.			
4. Metallic toxins: speciation and analysis.	(*)		
5. Biogenic amines and their analysis.	(*)		
6. Marine biotoxins and their analysis.	(*)		
7. Quality control in the analytical laboratory.	(*)		
Reference materials. Validation.			
(*)TEMA 8. Técnicas cromatográficas acopladas a	a (*)*		
espectrometría de masas.			
Planning			
	Class hours	Hours outside the To classroom	tal 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 guid	ance only and does not take	e into account the heteroge	neity 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.		

SeminarsThe 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.Case studiesThe 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.

Assessment					
	Description	Qualification	Trai	ning a	and
			Learning Results		
Lecturing	The attendance and participation of the students in the classes, in the	20	A1 B1	C3	D1
	discussion of contents and exercises, will be evaluated.		44		D2
Case studies	Problem solving and practical cases will be evaluated, as well as the	20	44 B5	C3	D2
	student's autonomous work.		45		D5
Objective questions	There will be an exam with multiple choice questions that will	40	44 B1	C3	D1
exam	evaluate the theoretical and practical knowledge acquired in the		45 B5		D5
	course.				
Self-assessment	Test-type questionnaires will be carried out through the teaching	20	44 B1	C3	D1
	platform, so that students can evaluate their degree of acquisition of		45 B5		D5
	the subject's competences.				

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

Ruiter A., El pescado y los productos derivados de la pesca: composición, propiedades nutritivas y estabilidad, Ed. Acribia,

Valcarcel M, Principios de Química Analítica, Springer-Verlag Ibérica, Barcelona.,

Ashurst P.R., Dennis M.J., Analytical Methods of Food Authentication, Black Academic and Professional, London., Watson, D.H., Natural Toxicants in Food, Academic Press,

Complementary Bibliography

Sorensen H., Sorensen S. (, Chromatography and capillary electrophoresis in food analysis,, Royal Society of Chemistry, London,

Ebdon L., Pitts L., Cornelis R., Crews H., Donard O.F.X., Quevauviller Ph., **Trace Element Speciation for Environment Food and Health**, Royal Society of Chemistry, UK,

D'Mello J.P.F., Food Safety: Contaminants and Toxins, CABI Publishing, USA.,

Campañó Beltrán R., Ríos A, Garantía de la calidad en los laboratorios analíticos, Ed. Síntesis, Madrid,

Recommendations

Other comments

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