Universida_{de}Vigo

Subject Guide 2017 / 2018

	IG DATA			
Quality of I	-Isnery and Aquaculture Products			
Subject	and Aquaculture			
	Products			
Code	V11M085V01302			
Study	(*)Máster			
programme	Universitario en			
1 5 -	Ciencia e			
	Tecnoloxía de			
	Conservación de			
	Produtos da Pesca			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Mandatory	2nd	1st
Teaching	Spanish			
language				
Department				
Coordinator	Tovar Rodríguez, Clara Asunción			
Lecturers	Barros Velázquez, Jorge			
	Garcia Cabado, Ana			
	Losada Iglesias, vanesa			
	Soleio Sesio, Pabio Tovar Podríguoz, Clara Asunción			
- F-mail				
Web	http://webs.uvigo.es/pesca.master/			
General	In this area, the modifications of the organoleptic chara	octors that occur a	after the canture of	the fish and the
description	effects of the refrigeration and freezing on the loss of fr of determining freshness exist. Methods for recognizing biochemical changes subsequent to capture and during procedures for analyzing fish quality and related legisla tests and specific techniques for the alterations of froze studied.	reshness of the fig food alterations storage shall be stion will also be a en and preserved	shery products, as during storage and studied. Microbiolo addressed. In addit foods in the frozen	well as the methods for detecting ogical criteria and on, rapid recognition state will be
Competenc	ies			
Code				
B1				
B2				
B3 (*)Que	os estudantes desenvolvan as habilidades para realizar	traballos experim	ientais, manexo de	elementos
materia	ais e biolóxicos e programas relacionados.			
B4 (*)Que	os estudantes desenvolvan as capacidades de traballo e	en equipo, enrique	ecidas pola pluridis	ciplinariedad.
B5 (*)Que	os estudantes desenvolvan a habilidade de elaboración,	presentación e d	lefensa de traballos	ou informes.
B6				
B7				
B8 (*)Que haberá	os estudantes posúan as habilidades de aprendizaxe que de ser en gran medida autodirigido ou autónomo.	e lles permitan co	ontinuar estudando	dun modo que
C11 (*)Dete embala defecto	rminar os criterios e procedementos para o control da ca xe utilizados no seu circuíto comercial. Coñecer os proce os.	alidade dos produ edementos para o	itos da pesca e dos o seu control analít	envases e co e detección de
C12 (*)Apro básicos	ximación ao control de calidade de cada unha das liñas a da xestión da calidade de produto.	de produción dos	produtos pesqueir	os. Coñecementos
Learning o	utcomes			
Expected res	sults from this subject			Training and

Learning Results

To know the basic aspects of the quality control of fishery and aquaculture products (PPAs)	B1
	B2
	B3
	B4
	B5
	B6
	B7
	B8
	C11
	C12
Know the general aspects of quality control: packaging and packaging.	B1
	B2
	B3
	B4
	B5
	B6
	B7
	B8
	C11
	C12
Know the specific and operational aspects of quality control.	B1
	B2
	B3
	B4
	B5
	B6
	B7
	B8
	C11
	C12

Contents	
Торіс	
SUBJECT 1. Basic aspects of the control of Quality of fishery products and the Aquaculture (PPAs)	 organoleptic and biochemical changes subsequent to capture. Effects of refrigeration on loss of freshness. Modifications of the constituents of fish during the Processing and storage. Abidit pollutants
SUBJECT 2. Microbiological aspects related	Abiolic politicalits
With the conservation of the fish.	- Legislative progress and alternative methods.
SUBJECT 3. Physical Methods of quality control of Fishery products	 Rheology of gels for the determination of physical properties: 1) Oscillatory methods (test in tension sweeps and sweep of frequency; 2) Static methods (load-recovery test, temperatura Constant: determination of gel strength, exponent of relaxation and relax time.
SUBJECT 4. Quality control in packaging. Defects. More common in packaged products.	 Know the methods of recognition of defects. Know the guidelines of action in the daily practice of the industry.
SUBJECT 5. Practical classes	 Determination of sensory, chemical and microbiological parameters of the quality. Nutritional composition, presence of additives and contaminants.

Planning			
	Class hours	Hours outside the classroom	Total hours
Master Session	32	56	88
Group tutoring	3	2	5
Laboratory practises	25	25	50
Multiple choice tests	2	5	7
*The information in the planning table	e is for guidance only and does no	ot take into account the het	erogeneity of the students

Methodologies		
	Description	
Master Session	Exposition by the teacher of the contents on the subject of study. bases.	
	Theoretical and exercises of projects to be developed by the student.	
Group tutoring	Resolution of doubts and queries, both in the individual level and in small group.	
Laboratory practises	Determination of sensory, chemical and microbiological parameters of the quality, composition.	
	Nutritional, presence of additives, contaminants	

Personalized attention

Methodologies Description

Group tutoring The student will be guided in the acquisition of basic skills and related problem solving With the subject matter of study. The student's progress will be tracked.

Assessment				
	Description		Training and Learning Results	
Master Session	Master session Problem solving and case studies will be evaluated. So Like, the autonomous work of him student.	o 20	B1 B2 B7 B8	C11 C12
Laboratory practis	sesThe performance and results of the Practice memory.	20	B3 B4 B5 B7 B8	C11 C12
Multiple choice te	stsTest of test type The theoretical knowledge acquired in this subject will be evaluated, Through a test with test questions.	60	B1 B2 B7 B8	C11 C12

Other comments on the Evaluation

Sources of information

Basic Bibliography

A. O. A. C., Official Methods of Analysis (I4th edn). Association of Official Analytical Chemist, Ariington, USA, FAO/DANIDA, El pescado fresco: su calidad y cambios de calidad,

FARBER J., DODOS K., **Principles of modified-atmosphere and sous vide product packaging.**, A technopnic Publishing Company Inc,

HEBARD, D. E., Flick G. J. , Martin R. E., Occurrence and significance of trimethylamine oxide and its derivates in fish and shellfish. Chemistry and biochemistry of marine food products, Avi Publishing Co. Conneticut,

GOULD, New methods of preservation P., Blackie Academic and Professional,

Jae W. Park, Surimi and surimi sea food, 2nd edition,

Complementary Bibliography

BEATTY S. A.; N. E. GIBBONS, The measurement of spoilage of fish, J. Fish Res. Bd. Can 3 (1): 79-9 1.,

BEATTY S.A., Studies of fish spoilage. I The trimetylamine oxide content of the muscle of fish of Nova Scotia., J. Fish Res. Bd. Can. 4 63-68,

CASTELL, C. H.; B. SMITH Y N. NEAL., Production of dimethylamine in muscle of several species of gadoid fish during frozen storage, especially in relation to presence of dark muscle, J. Res. Bd Can., 28 (1): 1-5,

CASTELL, C. H.; SMITH B. Y DYER, W. J., Simultaneous measurements of trimethylamine and diniethylarnine in fish, and their use for estimating quality of frozen storage gadoid fish., Fish Res. Bc/. Can., 31: 383-389,

COLLINS y. K., **Studies of fish spoilage. VIII: Volatile acid of cod muscle pressjuice**, J. Fish. Res. Bd. Can,, 5 (3): 197-202,

DYER W. J., **Ainines in fish muscle. 1**.Colorimetric determiniation of trimethylainine as the picrate salt., 1 Fish res. Bd. Can., 6 (5): 351,

DYER W. J., Amines in fish Muscle. VI. Trimethyiamine Oxide Content of Fish and Marine Invertebrates, J. Fish. Res Rd. Can., 8 (5).,

GIILL, T. A.; THOMPSON, J. W., **Rapid, automated analysis of amines in seafood by ion-moderated position I-IPLC.**, 1. Food Sci., 49: 603-606.,

Recommendations