

Course Unit	Food authenticity and certification schemes		Field of study	Food industries	
Master in	Food Quality and Safety		School	School of Agriculture	
Academic Year	2020/2021	Year of study	1	Level	2-1
Type	Semestral	Semester	1	ECTS credits	6.0
Code	6369-508-1202-00-20				
Workload (hours)	162	Contact hours	T 30	TP -	PL 30
			TC -	S -	E -
			OT 4	O -	

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s) Maria Fátima Alves Pinto Lopes da Silva

Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:

1. Know the importance of certification schemes and authenticity in the quality of food products;
2. Know and be able to implement the main institutional and private certification systems concerning to the agro-food production and food products;
3. Identify key issues of authenticity;
4. Develop and implement procedures for checking the authenticity of different food products.

Prerequisites

Before the course unit the learner is expected to be able to:

Students should have basic knowledge about food chemistry and food technology and processing

Course contents

Introduction to the issues of certification schemes and authenticity of food products. Certification of qualified products and production systems: concepts and definitions. Objectives, advantages and scope. Main institutional certification schemes relating to products and mode of production, including organic farming, IPM and Integrated Production, Protected Designation of Origin, Protected Geographical Indication, Traditional Speciality Guaranteed. Definitions of authenticity, fake products, adulterated and authentic. Legal aspects of authenticity. Procedures for checking the authenticity. Verification of the composition according to the label. Difficulty of guaranteeing the authenticity of agro-food products. Examples of application to the products authenticity: olive oil and vegetable oils, and juices and derived from fruits, aromatic and medicinal herbs, honey, meat and meat products, milk and dairy products, and coffee.

Course contents (extended version)

1. Introduction to the authenticity of food products
 - Definitions
 - Legal aspects of authenticity: national and international laws and standards
 - Authenticity for the industry, authority's organisms and consumers
2. Certification of qualified products and production systems:
 - Concepts and definitions.
 - Objectives, advantages and scope.
 - Main institutional certification schemes relating to products and mode of production.
3. Authenticity control methods
 - Composition according to the label
 - Difficulties to ensure the authenticity of agro-food products
 - Olive oil and vegetable oils authenticity
 - Meat and meat products authenticity
 - Milk and milk products authenticity
 - Medicinal and aromatic plants authenticity
 - Honey authenticity
 - Juices and fruit derivatives authenticity
 - Coffee authenticity

Recommended reading

1. Food Authentication, Edited by P. R. Ashurst and M. J. Dennis, Blackie Academic & Professional, 1996, Chapman & Hall
2. Food Authenticity Issues and methodologies, coordinator Michèle Lees, Concerted action n° AIR3-CT94-2452, Eurofins Scientific 1998
3. Food Safety and Food Quality, Issues in environmental science and technology, editors R. E. Hester and R. M. Harrison, The Royal Society of Chemistry, 2001
4. Food authenticity and traceability, edited by Michèle Lees, CRC press and Woodhead Publishing Limited, 2003
5. Informação disponibilizada nos sites: <http://www.lcd.online.org>. <http://www.ipq.pt>. <http://europa.eu.int/>; <http://www.codexalimentarius.net/>. <http://www.iso.org>.

Teaching and learning methods

Classes: theoretical, practical and laboratorial lessons about the themes of the course unit. Laboratorial work to realize experimental protocols. Non-contact hours: study of the subjects covered in the classes. Search bibliography for elaboration and discussion of the work of practical lessons to present and discuss in a seminar.

Assessment methods

1. Alternative 1 - (Regular) (Final, Supplementary, Special)
 - Work Discussion - 40% (Group Works with presentation and discussion. Minimum 10 values)
 - Practical Work - 10% (Reports of laboratorial classes)
 - Final Written Exam - 50% (Minimum 8 values)
2. Alternative 2 - (Student Worker) (Final, Supplementary, Special)
 - Work Discussion - 50% (Group Works with presentation and discussion. Minimum 10 values.)
 - Final Written Exam - 50% (Minimum 8 values)

Language of instruction

Portuguese

Electronic validation

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07-11-2020	08-11-2020	09-11-2020	10-11-2020