

Course Unit	-	Field of study	-
	-	School	School of Technology and Management
Academic Year	2022/2023	Year of study	1
Type	Semestral	Semester	1
Workload (hours)	54	Contact hours	T - TP - PL - TC - S - E - OT - O -
		Level	ECTS credits 2.0
		Code	5063-749-1103-00-22

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 Eugénia Madureira Gouveia, 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 and understand the rational, concepts and objectives of certification in agriculture
2. Understand the methods for certification in agriculture and agricultural production
3. Gain skills to use, implement and maintain certification
4. Identify the main authenticity problems associated with raw materials and agri-food products, as well as knowing the operational criteria that allow their identification
5. Know legal and regulatory aspects of authenticity and certification of food products, as well as being able to search for this information and interpret it
6. Know the control, inspection and regulation entities of the food sector

#### Prerequisites

Before the course unit the learner is expected to be able to:  
not applicable

#### Course contents

Certification systems in agriculture and agricultural production. Principles and objectives. General certification methodology: technical reference, management regulation, control, certification system. Institutional certification systems (Integrated Production, Ecological Production) and certification promoted by private entities (industry, distribution, ONGs and others- Global Gap, Demeter, Biodynamic, Green, Slow Food). Food authenticity issues and their control processes. Specific examples.

#### Course contents (extended version)

1. Certification systems in agriculture and agricultural production. Principles, concepts, objectives
2. General certification methodology and steps
3. Institutional certification systems (Integrated Production, Ecological Production)
4. Private certification (industry, distribution, ONGs and others)
5. Food authenticity issues
  - Definitions: food authenticity and food fraud; types of food fraud; authentic products
  - Ways to approach food authenticity. Main steps
6. Authenticity control processes
  - Legal aspects of authenticity: national and European laws and standards
  - Main operational criteria for identifying food fraud
  - Composition according to the label
  - Difficulties in guaranteeing the authenticity of agri-food products.
7. Examples of verification and authenticity control

#### Recommended reading

1. EFSA Journal and "ScientificOpinions", Reasoned Opinions" and "Scientific and Technical Reports"
2. Official web pages: DGAV, DGADR, ASAE, EFSA
3. FoodIntegrity Handbook. A guide to food authenticity issues and analytical solutions, Jean-François Morin and Michèle Lees (Eds. ), 2018, Eurofins Analytics France.
4. FAO. Food fraud – Intention, detection and management. Food safety technical toolkit for Asia and the Pacific No. 5. 2021. Bangkok
5. Food authenticity and traceability, edited by Michèle Lees, CRC press and Woodhead Publishing Limited, 2003

#### Teaching and learning methods

Classroom and online classes. Exposition of the proposed subjects to promote skills and utilisation of online resources (DGAV, EFSA, EU websites) and national and European regulation. Individual and/or group activities (worksheets).

#### Assessment methods

- Alternative 1 - (Regular, Student Worker) (Final, Supplementary, Special)
  - Reports and Guides - 50% (worksheets)
  - Case Studies - 50%

#### Language of instruction

Portuguese

#### Electronic validation

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10-07-2023	12-07-2023	12-07-2023