

Course Unit	Option I - null		Field of study	Health	
Master in	Applied Health Sciences - Biotechnology		School	School of Health	
Academic Year	2020/2021	Year of study	1	Level	2-1
Type	Semestral	Semester	2	ECTS credits	4.5
			Code	5055-669-1206-05-20	
Workload (hours)	121,5	Contact hours	T -	TP -	PL -
			TC -	S -	E -
			OT -	O	54

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) Juliana Almeida de Souza, Vera Alexandra Ferro Lebres

Learning outcomes and competences

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

1. Create and develop innovative products or processes in food and nutrition, according to society's trends.
2. Define strategies for a creative and innovative process, for the development of products / processes in food and nutrition, based on multidisciplinary and multicultural innovation and research.
3. Develop a project for an innovative product or process in food and nutrition, fulfilling all stages of Design Thinking or similar.
4. Submit an innovative product or process to an ideas contest or similar.

Prerequisites

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

Course contents

1. Megatrends and Innovation in Food and Nutrition 2. Contextualization of Design Thinking in the food context 3. Food and Nutrition innovation project: From problem to solution; From need to product.

Course contents (extended version)

1. Future thinking and Innovation in Food and Nutrition
 - Trends and Megatrends
 - Game changers
 - Black swans
 - Utopia and Distopia
2. Design Thinking in the food context
 - Understanding and Empathising
 - Definition
 - Ideation
 - Prototype
 - Test
 - Reanalysis and Pitch
3. Market analysis.
 - Idea Contest and Funding
 - Application process

Recommended reading

1. Plattner, H. , Meinel, C. , & Leifer, L. (2012). Design Thinking Research: Studying Co-Creation in Practice. Springer Berlin Heidelberg.
2. Curedale, R. (2017). Design Thinking Process & Methods 4th Edition. Design Community College Incorporated
3. Stickdorn, M. , & Schneider, J. (2014). Isto é Design Thinking de Serviços: Fundamentos, Ferramentas, Casos. Bookman Editora.
4. Ferreira, M. ; Santos, J. e Serra, F. , (2010). Ser Empreendedor – Pensar, Criar e Moldar a Nova Empresa, Edições Sílabo, Lisboa.

Teaching and learning methods

Active methodologies, focused in team project development, with teachers guidance.

Assessment methods

- Ordinary evaluation - (Regular, Student Worker) (Final, Supplementary, Special)
- Projects - 100% (Written report and oral presentation and discussion.
- Integrated project with CU: PPCS and PIS)

Language of instruction

Portuguese, with additional English support for foreign students.

Electronic validation

Juliana Almeida de Souza, Vera Alexandra Ferro Lebres	Josiana Adelaide Vaz	Antonio Jose Madeira Nogueira	Adília Maria Pires da Silva Fernandes
19-07-2021	19-07-2021	19-07-2021	20-07-2021