

COURSE INFORMATION					
Course Title	Code	Semester	L+P+L Hour	Credits	ECTS
Food Product Development and Innovation	SFS 512	Fall	3 + 0 + 0	3	10

<b>Prerequisites</b>	-
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<b>Language of Instruction</b>	English
<b>Course Level</b>	Master's degree
<b>Course Type</b>	Elective
<b>Course Coordinator</b>	Staff
<b>Instructors</b>	Staff
<b>Assistants</b>	
<b>Goals</b>	This course aims at an understanding of the food product development and innovation processes and practices used in the food industry with specific focus on R&D.
<b>Content</b>	Product development and innovation in the food industry using a multidisciplinary approach. Research and development in product development and innovation - Product, process and packaging development.

Learning Outcomes	Programme Learning Outcomes	Teaching Methods	Assessment Methods
1) Ability to understand the food product development and innovation processes in food industry	1, 5, 6	1,2,3,5	A,B,C
2) Knowledge of multidisciplinary approaches and methodologies used for food product development and innovation	5, 6	1,2,3, 5	A,B,C
3) Knowledge of R&D activities and functions in food product development and innovation	1, 3, 5,6	1,2, 3, 5	A,B,C

<b>Teaching Methods:</b>	1: Lecture, 2: Question-Answer, 3: Discussion, 4: Assignment, 5: Guest lecturer, 6: Case Study
<b>Assessment Methods:</b>	A: Exam B: Assignment C: In-class activity

<b>COURSE CONTENT</b>
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<b>Week</b>	<b>Topics</b>	<b>Study Materials</b>
1-2	Introduction to food product development and innovation in the food industry	Materials for the course provided by instructor
3-4	Multidisciplinary approach in food product development and innovation – the disciplines and actors involved	Materials for the course provided by instructor
5-6	The food product development process	Materials for the course provided by instructor
7-8	The role of consumers in food product development	Materials for the course provided by instructor
9	R&D in food product development	Materials for the course provided by instructor
10-11	R&D in food product development: product development	Materials for the course provided by instructor
12-13	R&D in food product development: process development	Materials for the course provided by instructor
14	R&D in food product development: packaging development	Materials for the course provided by instructor

#### **RECOMMENDED SOURCES**

<b>Textbook</b>	-
<b>Additional Resources</b>	Selected sources will be provided by the course instructor

#### **MATERIAL SHARING**

<b>Documents</b>	<a href="http://yulearn.yeditepe.edu.tr">yulearn.yeditepe.edu.tr</a>
<b>Assignments</b>	<a href="http://yulearn.yeditepe.edu.tr">yulearn.yeditepe.edu.tr</a>
<b>Exams</b>	

#### **ASSESSMENT**

<b>IN-TERM STUDIES</b>	<b>NUMBER</b>	<b>PERCENTAGE</b>
Mid-Term	1	58
Assignments and in class participation	1	42
<b>Total</b>		<b>100</b>

<b>CONTRIBUTION OF FINAL EXAMINATION TO OVERALL GRADE</b>	40
<b>CONTRIBUTION OF IN-TERM STUDIES TO OVERALL GRADE</b>	60
<b>Total</b>	<b>100</b>

<b>COURSE CATEGORY</b>	Core course
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<b>COURSE'S CONTRIBUTION TO PROGRAMME</b>						
No	Program Learning Outcomes	Contribution				
		1	2	3	4	5
1	Knowledge of current and future challenges in the food system			X		
2	Ability to define and analyse food systems using the food system framework, ability to integrate sustainability outcomes into food system framework					
3	Ability to apply knowledge in science, engineering and technology for the solution of food system problems			X		
4	Ability to apply the food system framework and systems thinking for the critical evaluation of food systems and food system challenges.					
5	Ability to use multidisciplinary design approaches for sustainability outcomes in food systems.			X		
6	Knowledge and skills to use innovation methods, approaches and tools for sustainability outcomes in food systems			X		

<b>ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE DESCRIPTION</b>			
Activities	Quantity	Duration (Hour)	Total Workload (Hour)
Course Duration (Including the exam week: 14 x Total course hours/week)	14	3	42
Hours for off-the-classroom study (Pre-study, practice, review/week)	14	11	154
Assignments	4	10	40
Midterm	1	3	3
Final exam	1	3	3
<b>Total Work Load</b>			242
<b>Total Work Load / 25 (h)</b>			9.7
<b>ECTS Credit of the Course</b>			10