



Course syllabus

Introduktion till livsmedelssystem Introduction to the Food Systems

KLGN70, 7,5 credits, A (Second Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED B/K

Date of Decision: 2023-04-18

General Information

Main field: Food Systems.

Compulsory for: MLSA1

Language of instruction: The course will be given in English

Aim

The SPOC introduces Master of Food System students to the concept of Food Systems, and the role of systems innovation to solve societal challenges. They learn about the origins and potential use of these concepts to create new value-added products and services to facilitate more sustainable and healthier diets, and foster circularity and resource efficiency. System science principles are introduced to analyse and optimise the workings of complex systems. Finally, specific elements of Food Systems are discussed, and possible cases of new networks considered.

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- Be able to understand and discuss the role of innovation in the food system
- be able to demonstrate the importance of a food system approach and its relevance for system innovation
- through a selected consumer segment demonstrate consumer insight and understanding the driving factors of consumers about their food choices
- be able to discuss key principles of system science, in particular those relevant for food systems

- be able to analyse the principal components of the food system and describe their systemic interactions and dependencies

Competences and skills

For a passing grade the student must

- be able to critically evaluate different responses to current challenges in food systems
- have the ability to independently and in group plan, report and discuss the findings and conclusions of practical assignments on the topic of sustainable food processing
- be able to model their own career in the food system by reflecting on existing competencies and the potential for knowledge and skill development in the chosen study path of the master's programme

Judgement and approach

For a passing grade the student must

- be able to independently seek and evaluate information in from different sources
- show ability for teamwork and collaboration in different groupstioner och beroenden

Contents

Introduction to Food Systems is taught as a four week online course via the platform FutureLearn. All students from all participating universities join the course at the beginning of the programme.

WEEK 1 The Case of Food Systems and How it is Related to Food Ethics

Introduction to the Course

Why Food Systems? Global Challenges and Trends

Panel discussion 1: Food systems focus

Innovation Opportunities in Food Systems: Creativity and Transformational Power

Food Systems in a Societal Context: Ethics and Environmental Sustainability

Case study I: The Policy Perspective

Summary Week I

WEEK 2 Why we need Food Ethics & the fundamentals of System Sciences & Food System Nodes I

Food Systems in Societal context: Ethics and Environmental Sustainability

An Introduction to System Science

System Elementals I

System Elementals II

Summary Week II

WEEK 3

Food System Nodes I

Introduction

Production

Processing

Food Distribution and Logistics

Food Choice from a Consumer Perspective

Panel Discussion series

Summary week III

WEEK 4 Food System Nodes II & Discussion series

Side Streams

Food Integrity

Panel Discussions: Microbiome and Career in the food system

Online Seminar Series: Current issues & trends in the food system

Summary week IV

Examination details

Grading scale: TH - (U,3,4,5) - (Fail, Three, Four, Five)

Assessment: Examination is: 1. implemented continuously through the FutureLearn platform, and structured feedback related to the EIT overarching learning outcomes addressed by the module. 2. an individual reflective portfolio developed by each student.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Admission

The number of participants is limited to: No

Contact and other information

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Course coordinator: Claudia Lazarte, claudia.lazarte@food.lth.se

Course homepage: <http://www.food.lth.se/english>

Further information: All the reading materials are provided in the platform FutureLearn