



LTH

FACULTY OF
ENGINEERING

Course syllabus

Kvalitet och livsmedelssäkerhet Quality and Food Safety

YTHF30, 15 credits, G2 (First Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED LIV

Date of Decision: 2023-04-17

General Information

Main field: Food Science. **Depth of study relative to the degree requirements:**

First cycle, has at least 60 credits in first-cycle course/s as entry requirements.

Compulsory for: KLMT3

Language of instruction: The course will be given in Swedish

Aim

The course aims to give students an in-depth understanding of how to work to constantly improve an organization's or company's all processes regarding quality and food safety with the participation of all employees. Risk assessment takes place with regard to chemical, microbiological and physical factors. Sustainability aspects are taken into account. In addition, knowledge is provided about authorities' public control work for safe products.

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- be able to describe and explain the chemical, microbiological and physical risk factors in the production and handling of food,
- have in-depth knowledge of food law,
- be able to account for different quality management and certification systems in the food industry,
- be able to account for an organization / company's quality and food safety work with environmental and sustainability aspects as well as social responsibility,

- have knowledge of the companies' responsibilities and role and the role of the authorities in the companies' own control work,
- have an understanding and insight into different parts of the exercise of authority and the authorities' control work.

Competences and skills

For a passing grade the student must

- be able to perform methodical risk assessment and control of validation and verification in the production and handling of food,
- be able to adapt the communication to different relevant groups in quality control work,
- have the ability to develop and improve food safety / quality for food production and handling using various monitoring / improvement tools,
- be able to methodically apply different quality and management systems in the food industry, e.g. BRC, ISO9001, ISO22000 and FSSC22000.

Judgement and approach

For a passing grade the student must

- be able to formulate and discuss questions about quality / food safety measures,
- have the ability to evaluate food quality and on that basis identify quality deficiencies and adapt measures for different situations,
- have the ability to value ethical and societal perspectives on safe food and meals,
- have the ability to identify needs for knowledge and take responsibility for their knowledge development related to the variability of food control.

Contents

The course goes through various quality and management systems as well as improvement tools used in the food / food industry and the grocery trade with regard to various aspects that affect quality and food safety from an environmental and sustainability perspective as well as legislation. Further the work of public control with food control is addressed. The student is given the opportunity to develop their competence to be able to participate and contribute to the prevention of organizations / companies quality work, control work and follow-up as well as assess risks and propose appropriate measures.

Examination details

Grading scale: UG - (U,G) - (Fail, Pass)

Assessment: Project work, assignments and exam

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.

Parts

Code: 0121. **Name:** Project.

Credits: 7. **Grading scale:** UG. **Assessment:** Written report, oral presentation and opposition **Contents:** Project

Code: 0221. **Name:** Assignments.

Credits: 4. **Grading scale:** UG. **Assessment:** Approved assignments

Code: 0321. **Name:** Written Exam.

Credits: 4. **Grading scale:** UG. **Assessment:** Approved written exam

Admission

Assumed prior knowledge: YTHA71 Food chemistry I, YTHA73 Food Microbiological Bases, YTHA30 Food Technology I - Heat and Heat Transfer, YTHA66 Basic Nutrition, YTHA68 Food Microbiological Quality, Food Chemistry II, YTHA60 Methods, YTHF10 Food Technology II - Food Preparation Processes, YTHF05 Nutrition II

The number of participants is limited to: No

Reading list

- Distributed material (web-based, hand-outs from lectures, etc.).

Contact and other information

Course coordinator: Birgitta Åsman, birgitta.asman@food.lth.se

Course homepage: <https://www.ple.lth.se/en/>

Further information: Study visits and guest lectures are compulsory. In case of legal impediment the student has to accomplish an individual assignment with an equivalent content.