



**LUNDS UNIVERSITET**  
Lunds Tekniska Högskola

*Course syllabus*

## **Livsmedelsteknologi för formulering Food Technology for Formulation**

**KLGN25, 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 Technology and Nutrition.

**Compulsory for:** MLIV1

**Elective Compulsory for:** MLSA1

**Elective for:** B4-lm

**Language of instruction:** The course will be given in English

### **Aim**

To provide a science-based holistic approach to colloidal, structural and functional properties of formulated food, its ingredients, and components.

### **Learning outcomes**

*Knowledge and understanding*

For a passing grade the student must

- know how the properties of different materials or formulations can be used to develop functional and healthy foods
- describe the food structure on different levels with different degrees of complexity
- be able to describe how different components of formulations interact and give rise to functionality
- know the colloidal properties and its role in various food systems

*Competences and skills*

For a passing grade the student must

- have the ability to critically identify, formulate and manage issues relating colloidal properties and texture of food formulations
- orally and written form discuss and report how different raw materials or ingredients can be used to develop functional food
- be able to explain, analyze and systematically highlight the importance of the formulation of food structure, content and bioavailability of the nutrient
- have the ability to independently and in group plan, report and discuss the findings and conclusions of practical sessions

#### *Judgement and approach*

For a passing grade the student must

- be able to independently seek and evaluate information in scientific articles
- show ability for teamwork and collaboration in different groups

## **Contents**

Lectures, lab practicals, seminars, field trip, project work (based on field trips to the food industry).

## **Examination details**

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

**Assessment:** Approved written test, orally presented project, participation in lab practicals and field trips. The grades 4 and 5 on the TH-scale are obtained through a home exam based on the project. It is not possible for students to take a re-examination for a higher grade based on the home exam. If students want to increase their grade this can be allowed (after approval of the course responsible) if the student performs a new project on which the home exam is based. This will only be possible the next time the course is given.

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**

**Assumed prior knowledge:** KLG30 Food Chemistry and Nutrition

**The number of participants is limited to:** No

**The course overlaps following course/s:** KLG080

## **Reading list**

- Coultate, T.P: Food - The chemistry of its components. The Royal Society of Chemistry, 2002, ISBN: 0-85404-615-1. Additional chapters from several books, which are electronically available from the university library, are used in the course.

## **Contact and other information**

**Course coordinator:** Lars Nilsson, [lars.nilsson@food.lth.se](mailto:lars.nilsson@food.lth.se)

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