

Course syllabus

Projektkurs i livsmedelstekniska enhetsoperationer Project Course in Food Unit Operations

YTHF25, 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.

Language of instruction: The course will be given in Swedish

Aim

The overall purpose is that the students in project form with cross disciplinary perspective acquire in-depth knowledge in food unit operations. This knowledge will be based on previous knowledge on unit operations earlier in the program. The aim is that the students shall be given experience from experimental planning, experimental work on food engineering equipment in pilot scale and evaluate data in order to solve a question formulation.

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- have in-depth knowledge on food unit operations
- show knowledge regarding how food unit operations affect different aspects of production and quality of food

Competences and skills

For a passing grade the student must

- be able to plan and perform an experimental study for a unit operation in pilot scale
- be able to use relevant analysis methods to answer food engineering question formulations
- be able to work in a project group to solve food engineering question formulations

Judgement and approach

For a passing grade the student must

- be able to validate experimental results and compare them to predicted theoretical values

Contents

The main part of the course is performed in the form of a project laboration. The project provides training in driving a project both independently and in group, to answer a food engineering question formulation. The project includes literature study, experimental plan, experimental work on a food unit operation in pilot scale as well as evaluation of experimental data in order to answer the question formulation.

Examination details

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

Assessment: Active participation in work shops, written project report, oral presentation and peer-review.

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:** Laborations.

Credits: 5. **Grading scale:** UG. **Assessment:** Active participation

Code: 0221. **Name:** Project Report.

Credits: 10. **Grading scale:** UG. **Assessment:** Approved written report, oral presentation and peer review.

Admission

Assumed prior knowledge: YTHA71 Food Chemistry I YTHA73 Food Microbiological Bases YTHA30 Food Technology I - Heat and Heat Transfer YTHA66 Basic Nutrition YTHF35 Food Microbiological Quality YTHF15 Food Chemistry II YTHA60 Methods YTHF10 Food Technology II - Food Preparation Processes YTHA40 Vegetables YTHA45 Animal based food products YTHF05 Nutrition II

The number of participants is limited to: No

Reading list

- Hand-outs.

Contact and other information

Course coordinator: Karolina Östbring, karolina.ostbring@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.