GHENT UNIVERSITY

Course Specifications

From the academic year 2021-2022 up to and including the academic year

Modern Aspects of Food (0000159)

Due to Covid 19, the education and assessment methods may vary from the information displayed in the schedules and course details. Any changes will be communicated on Ufora.

Course size *(nominal values; actual values may depend on programme)*

Credits 4.0 **Study time 120 h** **Contact hrs** 45.0h

Course offerings and teaching methods in academic year 2021-2022

A (semester 2)	English	Incheon	group work	6.0h
			lecture	25.0h
			practicum	6.0h
			seminar	8.0h

Lecturers in academic year 2021-2022

Van Haute, Sam	KRO1	lecturer-in-charge

Offered in the following programmes in 2021-2022	**crdts**	**offering**
Bachelor of Science in Environmental Technology	4	A
Bachelor of Science in Food Technology	4	A
Bachelor of Science in Molecular Biotechnology	4	A
Joint Section Bachelor of Science in Environmental Technology, Food Technology and Molecular Biotechnology	4	A

Teaching languages

English

Keywords

Food science, food composition, food microbiology, food safety and quality, food additives

Position of the course

This course introduces students to the basic concepts of food science: composition of foods, food fermentation, food safety, food quality, food additives, food preservation, functional foods, and the relationship between food and environment.

Contents

- What is food science?
- Careers in food science and technology
- Food categories, composition, and nutrition
- Food microbiology: structure, safety, spoilage, fermentation
- Food safety and quality
- Food preservation
- Food additives
- Functional foods: reformulation, micronutrient fortification

Initial competences

Students need to have taken: General Biology, Inorganic Chemistry I and II, Organic Chemistry I, Introduction to Biochemistry: Biomolecules

Final competences

1 Understand the basic principles of food science and gain an appreciation of the scope and breadth of the field of Food Science
2 Know the different food commodities and their compositions
3 Discuss the use of microbiology in the production of food and food components and learn the basics about the impact of microbiology on food safety and spoilage
4 Understand how food needs to be preserved in order to guard its safety and quality
5 Know different aspects of functional foods: reformulation and fortification
6 Utilize oral and written skills to communicate thoughts, information and solutions to food

science and technology issues

Conditions for credit contract

Access to this course unit via a credit contract is unrestricted: the student takes into consideration the conditions mentioned in 'Starting Competences'

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Practicum, Group work, Seminar, Lecture

Extra information on the teaching methods

Course group work

- **Selfstudy in Group**. Groups of students get an assignment to learn about a specific food product. A different aspect is explained weekly (nutrition, production, process, environmental impact and improvement). Every week the students report on this specific aspect and answer some questions in the report.
- **Final Report and presentation**. The students make a final report in groups and present the aspects of the food product to the class

Learning materials and price

Slides are available on Ufora

References

Course content-related study coaching

email and appointment through email

Assessment moments

end-of-term and continuous assessment

Examination methods in case of periodic assessment during the first examination period

Written examination with multiple choice questions, Written examination with open questions

Examination methods in case of periodic assessment during the second examination period

Written examination with multiple choice questions, Written examination with open questions

Examination methods in case of permanent assessment

Report, Participation, Oral examination

Possibilities of retake in case of permanent assessment

examination during the second examination period is not possible

Calculation of the examination mark

Final Written Examination	60%
Written examination with multiple choice questions	15%
Lab + Group work (Report, Participation, Oral)	25%