

Nutrition Disorders (I002727)

Due to Covid 19, the education and evaluation 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 5.0 Study time 150 h Contact hrs 50.0 h

Course offerings and teaching methods in academic year 2020-2021

A (semester 1)	English	Gent	group work	7.5 h
			lecture: plenary	7.5 h
			exercises	
			lecture	32.5 h
			self-reliant study activities	2.5 h

Lecturers in academic year 2020-2021

Kolsteren, Patrick	LA23	lecturer-in-charge
Lapauw, Bruno	GE35	co-lecturer

Offered in the following programmes in 2020-2021

	crdts	offering
Master of Science in Bioscience Engineering: Food Science and Nutrition	5	A
Master of Science in Nutrition and Rural Development	5	A
Exchange Programme in Bioscience Engineering: Food Science and Nutrition (master's level)	5	A

Teaching languages

English

Keywords

Undernutrition, micro-nutrient deficiencies, macro-nutrient deficiencies, diet related chronic diseases- population/individual level

Position of the course

This course provides information on the major nutrient deficiencies and their clinical appearance. The course offers also a public health perspective of nutrition disorders to demonstrate to the participants the public health importance of the thought diseases. Different control strategies are discussed so that participants can select appropriate action in function of the dynamics of the deficiencies. Multidisciplinary approaches are favoured where applicable. Central to the decision-making process is the evidence-base.

Contents

1. Introduction
2. How to perform a nutritional assessment
3. Anthropometry
4. Trends in nutrition problems

Part Undernutrition

1. For the major nutritional deficiencies: malnutrition, vitamin A and D deficiency, and mineral deficiencies the participants should know the signs and symptoms, how to assess, how to treat, how to alleviate and how to estimate the public health burden
2. How to address deficiencies in a rural health system respecting the district health provision
3. Osteoporosis
4. Nutrition and HIV

Part Overnutrition

1. Diet related chronic diseases such as hyperlipidemia, adult type diabetes, overweight: their importance, causality and strategies to alleviate
2. Metabolic disorders

3. Clinical nutrition: specific diets for medical conditions

Initial competences

Capacity to work in groups and basic knowledge in chemistry, biology, mathematics and human nutrition.

Final competences

- 1 The participants can describe the clinical picture of the major nutrient disorders.
- 2 Evaluate the importance of nutrient disorders in a specific context and select an appropriate action for control of micronutrient disorders.
- 3 Present, discuss and evaluate results of clinical trials.
- 4 Set up and evaluate a nutrition rehabilitation program.
- 5 Describe the determinants of overweight and diabetes and explain their mechanisms.
- 6 Define tools to measure nutritional status.
- 7 Evaluate interventions that promote nutrition in children and propose appropriate actions where necessary.

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Group work, lecture, self-reliant study activities, lecture: plenary exercises

Extra information on the teaching methods

The classes are a combination of ex cathedra courses (34 hrs) , individual assignments where a scientific paper on a relevant topic is presented (8 hrs) (2 hrs) , practical exercises on anthropometry (3hrs) and small group (3hrs) works on defining specific interventions to alleviate malnutrition within the context of health care delivery

Learning materials and price

Cost: 20.0 EUR

Syllabus, slides, overheads, weighing and measuring instruments.

References

See reference list in course notes, which are updated regularly.

Course content-related study coaching

Regular follow-up by the professors and their staff through organised 'question hours'.
Use of the electronic learning environment of Minerva.

Evaluation methods

end-of-term evaluation

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

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

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

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

Examination methods in case of permanent evaluation

Possibilities of retake in case of permanent evaluation

not applicable

Extra information on the examination methods

The exam is a written exam with open and multiple choice questions.

Calculation of the examination mark

The marks for the course are entirely based on the final exam score.
Students who eschew periodic evaluations for this course unit may be failed by the examiner.