Course syllabus for

Diet and Health - Molecular and Genetic Mechanisms, 7.5 credits

Kost och hälsa - molekylära och genetiska mekanismer, 7.5 hp
This course has been cancelled, for further information see Transitional provisions in the last version of the syllabus.
Please note that the course syllabus is available in the following versions:
Autumn2018 , Autumn2019 , Autumn2020 , Autumn2021 , Spring2024

Course code	3NT001
Course name	Diet and Health - Molecular and Genetic Mechanisms
Credits	7.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Nutrition Science
Level	AV - Second cycle
Grading scale	Fail (U), pass (G) or pass with distinction (VG)
Department	Department of Biosciences and Nutrition
Decided by	Utbildningsnämnden BioNut
Decision date	2018-02-26
Revised by	Education committee BioNut
Last revision	2024-06-13
Course syllabus valid from	Spring 2024

Specific entry requirements

A Bachelor's degree or a professional degree equivalent to a Swedish Bachelor's degree of at least 180 credits in biomedicine, cellular and molecular biology, pharmaceutics, medicine, nutrition, or the equivalent. And proficiency in English equivalent to English B/English 6.

Objectives

Upon completing the course, the student should be able to:

- identify specific research questions in the field of molecular and genetic mechanisms behind the relation between diet and health and formulate appropriate sub-questions and suggest relevant methodology for answering them in a scientific manner.
- critically analyze and discuss scientific evidence on molecular mechanisms behind the relation between diet and health, identify further research needs, aiming at forming a solid scientific basis for possible future advice to relevant authorities.

- write and present a scientific report with an evidence-based approach to answer a question on molecular mechanisms behind the relation between diet and health.

Content

This course deals with current scientific evidence on the relationship between dietary factors, metabolic and hormonal regulation, as well as cellular and molecular mechanisms that are important in the development and treatment of lifestyle-dependent diseases such as obesity, cardiovascular disease, diabetes and cancer. This course also deals with the current methods used in research on molecular and cellular mechanisms of nutrition. Ethical considerations in animal research is also included. During the course, the students will also receive training in presenting, discussing and communicating science in the area for the course.

Teaching methods

The course consists of workshops, Journal Clubs and assignments on group- and individual level.

Examination

The examination consists of an individual written report, graded Pass with distinction/Pass/Fail, and an oral presentation graded Pass with distinction/Pass/Fail. The grading criteria for all examinations are given in the study guide.

In the case of failed results, the assignment may be submitted a maximum of five more times. If the student has completed six failed examinations, no further examination opportunities will be given for that assignment.

A student who has failed two examinations for a course or part of a course, is entitled to have another examiner appointed unless special reasons speak against it.

Compulsory participation:
Assignments, work shops and Journal clubs are mandatory. The course director assesses if and, in that case, how absence from compulsory parts can be compensated. Before the student has participated in all compulsory parts or compensated absence according with the course director's instructions, the student's results will not be registered in LADOK.

If there are special reasons, or need for adjustment for a student with a disability, the examiner may decide to depart from the syllabus's regulations on examination form, number of examination opportunities, possibility of complementation of or exemption from compulsory parts of the course, etc. Content and learning goals as well as the level of expected skills, knowledge and abilities must not be altered, removed or lowered.

Transitional provisions

The course has been cancelled and was offered for the last time in the autumn semester of 2021.

Other directives

The course language is English.

A course evaluation will be conducted according to guidelines decided by the Committee for Higher Education at KI.

Oral evaluation will be carried out during the course.

Literature and other teaching aids

Reports, articles and other assigned literature will be specified in the study guide and electronically available.