



Syllabus

for course at advanced level

Molecular Nutrition II
Molekylär nutrition II

**15.0 Higher Education
Credits**
15.0 ECTS credits

Course code:	NU8011
Valid from:	Autumn 2010
Date of approval:	2024-12-11
Department	Department of Biosciences and Nutrition
Subject	Nutrition

Decision

This syllabus has been approved by the Board of the Faculty of Science at Stockholm University 2009-08-20.

Prerequisites and special admittance requirements

To be qualified for applying to this course you must have completed a Bachelor degree, or the equivalent, in natural science/medicine, including at least 30 hp cell- and molecular biology. In addition, Swedish upper secondary school course English B or equivalent or one of the following tests. Cambridge CPE och CAE: Pass. IELTS : 6.0 (with no part of the test below 5.0). TOEFL (paper based): 550 (with minimum grade 4 on the written test part). TOEFL (computer based): 213. TOEFL (internet based): 79.

Course structure

Examination code	Name	Higher Education Credits
N001	Molecular Nutrition II	15

Course content

The 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. The course also deals with the current methods used in research on molecular and cellular mechanisms of nutrition. The above knowledge is useful, for example, for careers in research and developmental work, investigation and management activities, method and product development in the field of nutrition and biomedicine. The course also provides a basis for further research in nutrition-related areas.

Learning outcomes

It is expected that the student after taking the course will be able to:

- structure and breakdown an issue in the field of molecular nutrition to the appropriate sub-questions and suggest appropriate methodology for answering them in a scientific manner.
- critically analyze and discuss scientific evidence in molecular nutrition, identify further research needs and provide scientifically based advice to the authorities.
- draw up and present a work with an evidence based approach to answer a question in molecular nutrition.

Education

The education consists of lectures, group education, seminars, exercises, project work, presentations, and assignments. Participation in the group education and seminars is compulsory. An examiner may rule that a student is not obliged to participate in certain compulsory education if there are special grounds for this after

consultation with the relevant teacher.

Forms of examination

a. Examination for the course is in the following manner: measurement of knowledge takes place through written and/or oral examination, written and/or oral presentations.

b. Grading is carried out according to a 7-point scale related to learning objectives:

A = Excellent

B = Very Good

C = Good

D = Satisfactory

E = Sufficient

Fx = Fail

F = Fail

c. Grading criteria for the course will be distributed at the start of the course.

d. A minimum grade of E is required to pass the course, together with completion of all compulsory education.

e. Students who fail to achieve a pass grade in an ordinary examination have the right to take at least further four examinations, as long as the course is given. The term “examination” here is used to denote also other compulsory elements of the course. Students who have achieved a pass grade on an examination may not retake this examination in order to attempt to achieve a higher grade. Students who have failed to reach a pass grade on two occasions have the right to request that a different teacher be appointed to set the grade of the course. A request for such appointment must be sent to the departmental board.

Interim

Students may request that the examination is carried out in accordance with this syllabus even after it has ceased to apply. This right is limited, however, to a maximum of three occasions during a two-year-period after the end of giving the course. A request for such examination must be sent to the departmental board.

Limitations

The course may not be included in a degree together with the courses Molecular Nutrition, 15 hp (NÄ3090), Molecular Nutrition 15 hp (NU8007) and Molecular Nutrition II, 30 hp (course part State-of-the-art Molecular Nutrition, 7.5 hp), or the equivalents.

Misc

The course is included in the Master's Programme of Nutrition, but can also be taken as an independent course. The course is given by the Department of Bioscience and Nutrition at Karolinska Institutet.

Required reading

Course literature is decided by the departmental board and is described in an appendix to the syllabus.