

Syllabus

for course at advanced level

Molecular Nutrition II

Molekylär nutrition II

30.0 Higher Education

Credits

30.0 ECTS credits

Course code:	NU8002
Valid from:	Autumn 2007
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 2006-09-27

Prerequisites and special admittance requirements

To be qualified for applying to this course you must have completed the course Microbiology, 6hp (BL3003), Molecular cell biology, 13.5 hp (BL3001), Genetics I, 7.5 hp (BL3002), Biological statistics, 3 hp (BL2006), or the equivalent courses. 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	State-of-the-art Molecular Nutrition Research	7.5
N002	Project Work on Molecular Research Methods in Nutrition	15
N003	Philosophy of Science, Research Ethics and Communication	7.5

Course content

a. The course covers modern methods used in molecular nutrition research, state-of-the-art knowledge in the molecular mechanisms that mediate the role of dietary factors in the development of diseases. The course also includes philosophy of science, research ethics and communication. The above mentioned knowledge is useful for work in for example research and development work, administrative work such as official handling of matters, and method and product development in the field of nutrition and biomedicine. The course also constitutes a basis for further research in areas related to diet.

b. The course consists of the following elements: 1. State-of-the-art molecular nutrition research 7.5 hp/ECTS. The element covers modern methods and discoveries in molecular nutrition research. 2. Project work on molecular research methods in nutrition 15 hp/ECTS- The element includes planning, carrying out, and evaluating a practical laboratory work. 3. Philosophy of science, research ethics and communication 7.5 hp/ECTS. The element covers theory of science and research ethics and communication of research, orally and in written text, with researchers, general public and media.

Learning outcomes

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

- understand and apply current methods in molecular nutrition research.
- demonstrate in-depth knowledge in mechanisms that mediate the effects of nutritional factors and the role

of dietary factors in the mechanisms of disease development.

- critically and systematically integrate current knowledge in molecular nutrition and analyse it.
- formulate research question for a practical laboratory work and plan, carry out and evaluate it.
- demonstrate insight into the concept of science and demonstrate awareness of ethical aspects in research and development work.
- communicate and discuss nutrition science with colleagues, general public, and media.

Education

The education consists of lectures, group education, exercises, project work, presentations, submitted work, and practical laboratory work. Participation in the practical laboratory work, 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 presentation of project work.

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, pbk, 10p (NÄ3090) or Public Health Nutrition II,(NU8001), the element of Theory of Science, Research Ethics and Communication, or Biochemical and Toxicologic Nutrition, 10p (NÄ4030).

Misc

The course is included in the Master's Programme in Nutritio, but can also be taken as an independent course.

Required reading

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