



DEPARTMENT OF FOOD AND NUTRITION, AND SPORT SCIENCE

IKA301 Measurement methods 1: Diet and physical activity, 7.5 higher education credits

Mätmetoder 1: Kost och fysisk aktivitet, 7,5 högskolepoäng

Second Cycle

Confirmation

This course syllabus was confirmed by Department of Food and Nutrition, and Sport Science on 2017-03-15 to be valid from 2017-08-28, autumn semester of 2017.

Field of education: Sports Science 50% and Medicine 50%

Department: Department of Food and Nutrition, and Sport Science

Position in the educational system

Main field of studies

Food and Nutrition

Sport Science

Specialization

A1N, Second cycle, has only first-cycle course/s as entry requirements

A1N, Second cycle, has only first-cycle course/s as entry requirements

Entry requirements

Bachelor degree in sport science, food and nutrition, nutrition, medicine, nursing, physiotherapy or equivalent.

Learning outcomes

On successful completion of the course the student will be able to:

Knowledge and understanding

- explain the theoretical and methodological background of the use of methods in measurement and analysis of dietary intake, food habits, and physical activity.

Skills and abilities

- practice measurement and analysis of dietary intake, food habits, and physical activity using both subjective and objective quantitative methods, and critically evaluate and discuss the results.
- design and perform evaluation of measurement reliability and validity of methods, and critically evaluate and discuss the results.

Judgement and approach

- critically evaluate and discuss the scientific literature concerning methodological quality (reliability, validity) in relation to measurement of dietary intake, food habits and physical activity.
- select a method to target a specific research question, to argue for the selection but also critically evaluate its strengths and limitations.

Course content**A. Introductory theoretical lectures**

Presenting the research field (dietary intake, food habits, physical activity) and its measurement methods, methodological challenges and development potentials. These lectures are the fundament for the practical experiments and seminars. Topics:

- overview of methods and measures in dietary intake, food habits and physical activity
- constructs/measures of different subjective and objective methods
- validity, reliability and comparability of subjective and objective methods
- novel methods to measure dietary intake, food habits and physical activity
- scientific papers and scientific arguments

B. Supervised practical experiments with evaluation seminars (mandatory)

Groups of students prepare, design and perform measurement of dietary intake, food habits and physical activity. They learn to use the methods (subjective, objective) and softwares for data collection, to create variables and simple databases for evaluation, and to evaluate output data in relation to previous research. The results and evaluations are prepared and presented at seminars. The skills of using various methods have to be demonstrated. The practical experiments are supervised by course teachers/tutors.

C. Supporting lectures

Methodological supervision to handle equipment, softwares, creating datasets, searching databases for literature, and read and understand scientific papers.

Form of teaching

Lectures, practical experiments and seminars. The pedagogical idea is learning by practicing, preparing, presenting and debating (argumenting). Teaching combines theoretical knowledge with practical skills. Emphasis is put on training in argumentation based on facts and feedback to performance. The goal is to promote critical thinking and deeper understanding.

Language of instruction: English

Assessment

The course is examined by practical examinations in relation to practical experiments and the handle of methods as well as reading a scientific paper, and the oral presentation at seminary with opposition.

If a student is absent from mandatory components, he/she is responsible to contact the person responsible for the course to be provided another course opportunity or alternative task.

If a student, who has failed the same examined component twice, wishes to change examiner before the next examination, a written application shall be sent to the department responsible for the course and shall be granted unless there are special reasons to the contrary (Chapter 6, Section 22 of Higher Education Ordinance).

The number of examination opportunities is limited to 5.

In cases where a course has been discontinued or has undergone major changes, the student shall normally be guaranteed at least three examination occasions (including the ordinary examination) during a period of at least one year from the last time the course was given. It must not go against Chapter 6 Section 21 of Higher Education Ordinance.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U).

All mandatory course components need to be completed to pass the course. The final grade is based on the combined performance on all course components.

To receive the grade Pass, one needs to demonstrate skills in handling and understanding of methods and equipment, and actively participating in practical experiments, group work and seminars. To receive the grade Pass with Distinction, one needs to demonstrate outstanding skills in handling and understanding of methods and equipment, and actively contributing to practical experiments, group work and seminars with a high level analytical skill, critical thinking, argumentation and support to development of discussions.

Course evaluation

Course evaluation is included. Written evaluation is performed using the teaching platform and the result guides development and planning of forthcoming course occasions. The results of and possible changes to the course will be shared with students who participated in the evaluation and students who are starting the course. In addition to the written, summative evaluation, oral, formative evaluations may occur. The person responsible for the course compile a report after the course has finished.