



**Karolinska
Institutet**

Course syllabus for

Methods for outcome evaluation of public health interventions, 7.5 credits

Metoder för effektutvärdering av folkhälsoinsatser, 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:

Autumn2010 , Spring2011 , Spring2012 , Spring2016 , Autumn2016

Course code	4FH045
Course name	Methods for outcome evaluation of public health interventions
Credits	7.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Public Health Sciences
Level	AV - Second cycle
Grading scale	Pass with distinction, Pass, Fail
Department	Department of Global Public Health
Decided by	Programnämnd 5
Decision date	2010-04-20
Revised by	Programnämnd 5
Last revision	2010-11-09
Course syllabus valid from	Spring 2011

Specific entry requirements

Students ought to have either attended the following courses included in the track, or otherwise acquired corresponding knowledge: Methods for studying the distribution of health (4FH043), Epidemiological methods for studying determinants of health (4FH042) and Statistics for epidemiologists (4FH040).

Objectives

Overall aim of the course is to build capacity in the evaluation of complex interventions ordinary carried out in public health. On completion of the course, the student should be able to: - formulate evaluation question(s) relevant to the outcome(s) of specific projects/types of intervention. - choose an evaluation design and justify the choice based on the purpose and type of intervention, the desired level of inference, and cost. - identify indicators and standards for the evaluation. - identify sources of information and type of data necessary to answer the evaluation question(s). - identify possible

confounding factors when establishing the causal role of a given intervention on the projected outcome.
 - draft a data-analysis plan relevant to the projected evaluation. - discuss pros and cons of different evaluation designs.

Content

During the course, principles of epidemiologic study design and of scientific inference will be applied to the task of evaluating the outcome of public health interventions in several fields (e.g. infectious disease control programs, lifestyle modification, etc.). Leading track of the course will be an appraisal of the complexity of this evaluation, implying both systemic and individual changes, as well as both distal and proximal outcomes. Topics will include: goals of evaluation and types of evaluation questions in Public Health, related to the concepts of outcome, process, reach, impact and equity; design and analysis of studies of intervention outcomes, such as randomized controlled trials (individual- or cluster-based) controlled non-randomized trial, pre-post comparisons, natural experiments, ecologic studies and other observational studies; the use of intermediate outcomes to understand how an intervention works; processes to be monitored in evaluating interventions in natural field conditions, such as adaptation and dissemination.

Teaching methods

A combination of the following working methods will be employed: lectures, self-assessing exercises with or without computer assistance; group work with assignment; individual work with assignment; literature review; study visits; oral communication. A progression will be established from the first two weeks (introductory and preparatory) where there will be a preponderance of lecture and individual exercise to the successive three weeks, with an increasing emphasis on applications and decision making.

Examination

The examination will consist of three components: a. a short written essay on the evaluation plan developed in the previous weeks, performed as group assignment. Graded Pass, Pass with distinction or Fail. b. an oral or poster presentation relative to the methods/results/conclusions of this evaluation, performed as group assignment. Graded Pass or Fail. c. an individual test in form of close-ended questions. Graded Pass, Passed with distinction or Fail. To obtain the grade Pass on the course the student must be awarded Pass on all three examination components. To obtain the grade Pass with distinction the student must be awarded Pass with distinction on either component a or c and Pass on remaining components. Compulsory participation Group work and completion of assignments are compulsory. The course director assesses if and, in that case, how failure to comply with compulsory tasks can be compensated. Before the student has participated in all compulsory parts or compensated absence in accordance with the course director's instructions, the student's results for the course will not be registered in LADOK. Limited number of examinations or practical training sessions Students who have not passed the regular examination are entitled to participate in five more examinations. If the student is not approved after four examinations, he/she is recommended to retake the course at the next regular course date, and may, after that, participate in two more examinations. If the student has failed six examinations/tests, no additional examination or new admission is provided. The number of times that the student has participated in one and the same examination is regarded as an examination session. Submission of a blank examination is regarded as an examination. An examination for which the student registered but not participated in, will not be counted as an examination. After each course occasion there will be at least six occasions for the examination within a 2-year period from the end of the course.

Transitional provisions

After each course occasion there will be at least six occasions for the examination within a 2-year period

from the end of the course.

Other directives

Course evaluation will be carried out in accordance with the guidelines established by the Board of Education. The course language is English.

Literature and other teaching aids

Applied epidemiology : theory to practice

Brownson, Ross C.; Petitti, Diana B.

2nd ed. : Oxford ;a New York : Oxford University Press, 2006 - xvii, 358 p.

ISBN:0-19-518741-5 (cloth : alk. paper) LIBRIS-ID:10383718

URL: <http://www.loc.gov/catdir/toc/fy0701/2005053914.html>

[Library search](#)

Donner, Allan; Klar, Neil

Design and Analysis of Cluster Randomization Trials in Health Research

London : Arnold Publishers, 2000