



**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
Course syllabus valid from	Autumn 2010

Specific entry requirements

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

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 motivate the choice - 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. Group work and completion of assignments constitute compulsory moments.

Examination

The examination will consist of three tasks: a. a short written essay on the evaluation plan developed in the previous weeks; b. an oral or poster presentation relative to the methods/ results/ conclusions of this evaluation; c. an individual test in form of close-ended questions. Tasks a. and b. will be conducted in groups, task c. will be individual. Absence from compulsory moments will be compensated by extra assignments with corresponding learning goal.

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