

Faculty of Medicine

# MPHP34, Cost-effectiveness and Impact Evaluation of Health Interventions, 7.5 credits

Kostnadseffektivitet och effektutvärdering av hälsointerventioner, 7,5 högskolepoäng Second Cycle / Avancerad nivå

# Details of approval

The syllabus was approved by The Master's Programmes Board on 2019-12-10 and was last revised on 2019-12-10. The revised syllabus applies from 2019-12-12, autumn semester 2020.

# **General Information**

Language of instruction: English

Main field of studies

Public Health Science

Depth of study relative to the degree requirements A1N, Second cycle, has only first-cycle course/s as entry requirements

## Learning outcomes

#### Knowledge and understanding

On completion of the course, the students shall be able to

- Account for and explain the purpose of evaluating health interventions and policies
- Account for the main quantitative methods and applications for evaluating the effects of health interventions and policies
- Account for the factors underpinning health economic evaluations and applications

#### Competence and skills

On completion of the course, the students shall be able to

- Identify strengths and weaknesses and assess the appropriateness of different evaluation methods in specific contexts in the field of public health
- Describe and critically assess methods and results in existing economic evaluations in the field of public health
- Actively contribute to a policy discussion from a health economics perspective based on relevant and current evidence

#### Judgement and approach

On completion of the course, the students shall be able to

- Critically assess ethical aspects and consequences of evaluations with special focus on the distribution of resources and outcomes
- Discuss and evaluate the role of health economic evaluations from the perspective of a policy maker

#### Course content

The course offers a basic introduction to methods for evaluation of health promotion activities. Half of the course specialises in health economic evaluations (cost-effectiveness) with a focus on prevention, interventions, and treatments to improve or protect the health of the individual or the population. The purpose of health economic evaluations is to supply a basis for prioritisation between different interventions and treatments. We will go through why and how economic evaluations are made, with special focus on assessing current examples in the literature.

The other half of the course focuses on effect evaluations in non-controlled research designs by means of so called quasi-experimental methods. An important part in decision making and thereby also economic evaluations is access to a correct estimation of the causal effect of the intervention. In the medical field, this is often performed through randomised controlled experiments. However, in many situations health and health care interventions are carried out without randomisation. Quasi-experimental methods are used when randomisation has not been carried out and tries to replicate a randomised experiment. We will introduce the most common methods, discuss their advantages and disadvantages, and how one can assess the application of the method in current examples from the literature. The course has an international perspective with respect to applications and analyses.

## Course design

The teaching of the course consists of three types of working methods. The first is lectures based on the reading list with elements of active learning. The second is training sessions where the students are trained to solve specific assignments, generally with a quantitative approach. The third form includes seminars on particularly important aspects.

#### Assessment

The examination consists of an individual written examination and a course portfolio, consisting of participation in compulsory seminars and training sessions, reoccurring quizzes with multiple-choice questions, and group work.

Written examination: 4.5 credits Course portfolio consisting of active participation in seminars and exercise sessions and passed group assignments and tests: 3 hp

Other forms of examination can be used if special circumstances apply

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Subcourses that are part of this course can be found in an appendix at the end of this document.

#### Grades

Marking scale: Fail, Pass, Pass with distinction.

The grading scale for the written examination is: Pass with Distinction, Pass and Fail. The grading scale for the course portfolio is Pass or Fail.

To pass the course a Pass is required in all parts.

To pass the course with distinction a Pass with Distinction on the written examination and Pass on the course portfolio is required.

## Entry requirements

To be admitted to the course, students must have a Bachelor's degree or the equivalent. Specific entry requirement: English B from Swedish upper secondary school or the equivalent . Basic biostatistics 7.5 credits or the equivalent.

# Subcourses in MPHP34, Cost-effectiveness and Impact Evaluation of Health Interventions

Applies from H19

1901 Written exam, 4,5 hp Grading scale: Fail, Pass, Pass with distinction
1902 Course portfolio, 3,0 hp Grading scale: Fail, Pass 4/4