



Faculty of Medicine

## **MPHP12, Public Health: Epidemiology and Public Health Research Methodology, 15 credits**

*Folkhälsovetenskap: Epidemiologi och folkhälsovetenskaplig  
forskningsmetodik, 15 högskolepoäng*  
Second Cycle / Avancerad nivå

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### **Details of approval**

The syllabus was approved by Committee for Biomedical, Medical and Public Health Education on 2016-02-10 and was last revised on 2017-04-04 by The Master's Programmes Board. The revised syllabus applies from 2017-04-05, spring semester 2017.

### **General Information**

The course is a compulsory component of the Master (120 credits) of Medical Science programme in Public Health.

*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

- explain the philosophy of science foundation for the research methodology that is used in public health studies
- explain key concepts and describe procedures for different epidemiological study designs and qualitative methods of relevance to public health issues
- compare the criteria that are of relevance to the assessment of the trustworthiness of epidemiological and qualitative research results
- explain and account for how epidemiological and qualitative research designs jointly can contribute to an understanding of the health determinants at the levels

This is a translation of the course  
syllabus approved in Swedish

of individuals, groups and communities

### **Competence and skills**

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

- independently identify appropriate study designs and choose methods for data collection and analysis and argue for these choices
- design a qualitative interview guide and a short questionnaire for the collection of epidemiological data
- implement and interpret a basic encoding/analysis of qualitative data and execute a descriptive statistical analysis of epidemiological data
- critically analyse and provide arguments based on the contents of research in the field of public health studies

### **Judgement and approach**

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

- independently assess, review and criticise public health research on the basis of ethical principles and guidelines
- reflect on and compare the limitations of different scientific approaches but also their complementary role for the development of knowledge

### **Course content**

The course provides an overview of the philosophies of science on which various research approaches in public health are based, as well as key concepts and approaches in terms of study design, data collection and methods for analysis, in relation to the research approaches. Global public health issues will be used as the basis for the formulation of both epidemiological and qualitative research questions. Student will receive supervised training in data collection, processing and interpretation of results in epidemiology and qualitative methods. Students will then follow the research process to produce a individual written assignment addressing both quantitative and qualitative methodologies. In this assignment, the students will work individually and together to develop problem formulations that are to be operationalized, and propose sampling strategies, data collection methods, and types of analysis. In the written assignments, the students are also to reflect on ethical issues and discuss how to enhance the credibility of results. The assignment also includes peer review of other students' assignments. The course also includes student-led seminars and critical reviews of research articles.

### **Course design**

The teaching consists of lectures, seminars and group assignments. The seminars and group assignments require compulsory attendance.

### **Assessment**

The assessment of the course is based on the following components: a course portfolio that includes active participation in compulsory individual and group course components (1.5 credits); and three individual written exams regarding philosophy of science (1.5 credits), epidemiology (5.5 credits), and qualitative methodology (4

credits).; One individual written assignment (2.5 credits) including a peer review assignment of other students' written assignments assessing the students' ability to formulate research questions and an appropriate study design to answer them.

*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 grades awarded for the written exams are Fail, Pass or Pass with Distinction, and for the course portfolio Fail or Pass.

For the three written exams and the individual written assignment the grades awarded are Fail, Pass, and Pass with Distinction. For the course portfolio, the grades awarded are Fail and Pass.

For a Pass with Distinction on the full course, the student must achieve a combined weighted average based on the three written exams and the individual written assignment that is considered to fulfil the criteria for a Pass with Distinction, and be awarded a Pass on the course portfolio.

## **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.

## Subcourses in MPHP12, Public Health: Epidemiology and Public Health Research Methodology

Applies from H18

1805 Individual Written Assignment, 2,5 hp  
Grading scale: Fail, Pass

Applies from V17

- 1701 Course Portfolio, 1,5 hp  
Grading scale: Fail, Pass
- 1702 Individual Written Exam Regarding Philosophy of Science, 1,5 hp  
Grading scale: Fail, Pass, Pass with distinction
- 1703 Individual Written Exam Regarding Epidemiology, 5,5 hp  
Grading scale: Fail, Pass, Pass with distinction
- 1704 Individual Written Exam Regarding Qualitative Methodology, 4,0 hp  
Grading scale: Fail, Pass, Pass with distinction
- 1705 Individual Written Assignment, 2,5 hp  
Grading scale: Fail, Pass, Pass with distinction